

TABLE OF CONTENTS

CHAPTER 1: RESEARCH PROBLEM AND CONTEXT.....	1
1 INTRODUCTION.....	1
1.1 BACKGROUND.....	1
1.1.1 Evolution of the world of work	2
1.1.2 Spirit and spirituality	4
1.1.3 Workplace spirituality	7
1.1.4 The experience of spirit at work	11
1.1.5 Workplace spirituality and other work outcomes	12
1.2 DEFINITION OF CONSTRUCTS	15
2 PROBLEM STATEMENT.....	18
3 RESEARCH GOAL.....	20
3.1 RESEARCH OBJECTIVES	22
3.2 RESEARCH QUESTIONS	23
4 RESEARCH METHODOLOGY.....	23
5 THESIS STRUCTURE.....	24
 CHAPTER 2: LITERATURE REVIEW.....	 25
1 SPIRITUALITY AND THE WORLD OF WORK.....	25
2 SPIRIT AND SPIRITUALITY.....	29
2.1 SPIRIT.....	29
2.2 SPIRITUALITY	30
2.3 DISTINCTION BETWEEN RELIGION AND SPIRITUALITY	43
3 INDIVIDUAL SPIRITUALITY.....	47
3.1 DEFINING INDIVIDUAL SPIRITUALITY	47
3.2 MEASURING INDIVIDUAL SPIRITUALITY.....	50
3.3 INDIVIDUAL SPIRITUALITY AS AN IMPORTANT WORKPLACE CONSTRUCT.....	60
4 ORGANISATIONAL/WORKPLACE SPIRITUALITY	62
4.1 DEFINING ORGANISATIONAL SPIRITUALITY	63

4.2 MEASURING ORGANISATIONAL SPIRITUALITY	70
4.3 ORGANISATIONAL SPIRITUALITY AS AN IMPORTANT WORKPLACE CONSTRUCT	72
4.4 IS ORGANISATIONAL SPIRITUALITY A TYPE OF CULTURE OR AN EXPERIENCE?	77
5 EXPERIENCE OF SPIRIT AT WORK.....	78
5.1 DEFINING SPIRIT AT WORK	78
5.2 HOW THE EXPERIENCE OF SPIRIT AT WORK MANIFESTS	80
5.3 MEASURING SPIRIT AT WORK	84
6 SPIRITUALITY AND POSITIVE WORK OUTCOMES	86
7 WORK ENGAGEMENT	88
7.1 DEFINING WORK ENGAGEMENT	88
7.2 DISTINGUISHING WORK ENGAGEMENT FROM OTHER CONSTRUCTS.	92
7.2.1 Job satisfaction	92
7.2.2 Job involvement	92
7.2.3 Organisational commitment.....	93
7.2.4 Workaholism	94
7.2.5 Job embeddedness	94
7.3 MEASURING WORK ENGAGEMENT	95
7.4 OUTCOMES OF WORK ENGAGEMENT	96
7.5 SPIRITUALITY AND WORK ENGAGEMENT	99
8 ORGANISATIONAL COMMITMENT	103
8.1 DEFINING ORGANISATIONAL COMMITMENT	103
8.2 DISTINCTION BETWEEN ORGANISATIONAL COMMITMENT AND WORK ENGAGEMENT.....	106
8.3 OUTCOMES OF ORGANISATIONAL COMMITMENT	107
8.4 SPIRITUALITY AND ORGANISATIONAL COMMITMENT	108
CHAPTER 3: RESEARCH METHODOLOGY	112
1 RESEARCH DESIGN AND METHODS.....	112
2 SAMPLING	114
2.1 SAMPLING PHASE 1	116
2.1.1 Response rate in sampling phase 1	118

2.2. SAMPLING PHASE 2.....	120
2.3 SELECTING INTERVIEWEES FOR SEMI-STRUCTURED INTERVIEWS	
NON-PROBABILITY JUDGEMENTAL SAMPLING	122
3 QUANTITATIVE PHASE OF THE RESEARCH PROCESS	126
3.1 SELECTION OF MEASUREMENT INSTRUMENTS.....	127
3.1.1 The Human Spirituality Scale (HSS)	128
3.1.2 The Organisational Spiritual Values Scale (OSVS).....	130
3.1.3 Validation of the HSS and OSVS in the South African context.....	131
3.1.4 The Spirit at Work Scale (SAW)	132
3.1.5 The Utrecht Work Engagement Scale (UWES).....	134
3.1.6 The Affective Organisational Commitment Scale (AOCS).....	136
3.2 ADDITIONAL QUESTIONS	137
3.3 PILOT STUDY	138
3.4 SURVEY PROCEDURE AND ADMINISTRATION.....	139
3.5 SAMPLE DESCRIPTION FOR QUANTITATIVE PHASE	142
3.6 ANALYSES OF QUANTITATIVE DATA	170
3.6.1 Exploratory Factor Analysis (EFA)	171
3.6.2 Confirmatory Factor Analyses (CFA)	171
3.6.3 Structural Equation Modelling (SEM)	173
3.6.4 Analysis of Variance (ANOVA).....	174
4 QUALITATIVE PHASE OF THE RESEARCH PROCESS	175
4.1 INTERVIEW PROCEDURE AND ADMINISTRATION.....	176
4.2 QUALITATIVE SAMPLE DESCRIPTION	182
4.3 ANALYSIS OF QUALITATIVE DATA	183
5 TRUSTWORTHINESS, QUALITY AND RIGOUR IN RESEARCH	184
CHAPTER 4: QUANTITATIVE RESULTS	187
1 RESULTS OF EXPLORATORY FACTOR ANALYSIS	187
2 RESULTS OF CONFIRMATORY FACTOR ANALYSES.....	193
2.1 THE HUMAN SPIRITUALITY SCALE (HSS).....	193
2.2 THE ORGANISATIONAL SPIRITUAL VALUES SCALE (OSVS)	208
2.3 THE SPIRIT AT WORK SCALE (SAW).....	221
2.4 THE UTRECHT WORK ENGAGEMENT SCALE (UWES).....	233

2.5 THE AFFECTIVE ORGANISATIONAL SCALE (AOCS).....	237
3 STRUCTURAL EQUATION MODELLING	240
3.1 ASSESSING STRUCTURAL MODEL VALIDITY – MODEL 1	245
3.1.1 Fit Indices for model 1	245
3.1.2 Co-variances and correlations between IS, OS and SAW.....	248
3.2 ASSESSING STRUCTURAL MODEL VALIDITY – MODEL 1A	249
3.2.1 Fit Indices for model 1A.....	250
3.3 ASSESSING STRUCTURAL MODEL VALIDITY – MODEL 1B	251
3.3.1 Fit Indices for model 1B.....	251
3.4 ASSESSING STRUCTURAL MODEL VALIDITY – MODEL 2	252
3.4.1 Fit Indices for model 2.....	253
3.4.2 Co-variances and correlations between IS, OS and SAW.....	255
4 ANALYSIS OF VARIANCE (ANOVA)	256
4.1 ANOVA OF INDIVIDUAL SPIRITUALITY WITH DEMOGRAPHIC VARIABLES	256
4.2 ANOVA OF ORGANISATIONAL SPIRITUALITY WITH DEMOGRAPHIC VARIABLES	260
4.3 ANOVA OF SPIRIT AT WORK WITH DEMOGRAPHIC VARIABLES.....	265
CHAPTER 5: QUALITATIVE RESULTS.....	272
1 SEMI-STRUCTURED INTERVIEW PROCESS.....	272
2 PHENOMENOLOGICAL DATA ANALYSIS.....	275
2.1 THE CODING PROCESS	276
2.1.1 Open Coding	276
2.1.2 Axial Coding	281
2.1.3 Selective Coding	282
2.2 GENERATED THEMES	284
2.2.1 Theme 1: Advice to organisations on how to treat people in organisations.....	284
2.2.2 Theme 2: Characteristics of spiritual work environments	291
2.2.3 Theme 3: The elements that characterise compassion.....	298
2.2.4 Theme 4: The elements that lead to participants experiencing energy and vigour at work or in their work	302

2.2.5 Theme 5: The elements necessary for connection to be experienced	305
2.2.6 Theme 6: Core values espoused by participants	307
2.2.7 Theme 7: Corporate Social Investment (CSI) initiatives	310
2.2.8 Theme 8: The elements required for effective collaboration in organisations.....	314
2.2.9 Theme 9: The elements that contribute to participants' personal meaning in life.....	316
2.2.10 Theme 10: Characteristics of non-spiritual work environments	318
2.3 CONTRIBUTION TO SPIRITUALITY VARIABLES	320

CHAPTER 6: DISCUSSION 326

1 RESEARCH OBJECTIVES.....	326
2 CONCLUSIONS ON RESEARCH QUESTIONS	327
2.1 RESEARCH QUESTION 1: IS THERE CONSTRUCT REDUNDANCY BETWEEN IS, OS AND SAW?	327
2.2 RESEARCH QUESTION 2: TO WHAT EXTENT DO CORRELATIONS EXIST BETWEEN IS, OS AND SAW?	328
2.3 RESEARCH QUESTION 3: WHAT IS THE RELATIONSHIP BETWEEN IS, OS AND SAW?	329
2.4 RESEARCH QUESTION 4: TO WHAT EXTENT DO IS, OS AND/OR SAW CONTRIBUTE COLLECTIVELY OR INDIVIDUALLY TO WE?.....	332
2.5 RESEARCH QUESTION 5: TO WHAT EXTENT DO IS, OS AND/OR SAW CONTRIBUTE COLLECTIVELY OR INDIVIDUALLY TO OC?	334
2.6 RESEARCH QUESTION 6: WHAT ARE THE VARIABLES THAT CONTRIBUTE TO IS, OS AND/OR SAW AND THEIR RESPECTIVE ROLES IN WE OR OC?	336
2.6.1 Variables that contribute to individual spirituality	336
2.6.2 Variables that contribute to organisational spirituality	337
2.6.3 Variables that contribute to spirit at work.....	338
2.7 RESEARCH QUESTION 7: WHAT ARE THE INDIVIDUAL AND ORGANISATIONAL FACTORS THAT CONTRIBUTE TO IS, OS AND/OR SAW?	339
2.7.1 Contributing individual and organisational factors from ANOVA	

procedures	340
2.7.2 Factors revealed through qualitative data analysis	341
2.7.2.1 Advice to organisations on how to treat people for more effective collaboration, engagement and commitment	341
2.7.2.2 Characteristics that describe spiritual work environments.....	343
2.7.2.3 The elements that characterise compassion.....	344
2.7.2.4 The elements that lead to participants experiencing energy and vigour at work or in their work.....	345
2.7.2.5 The elements necessary for connection to be experienced	345
2.7.2.6 Core values espoused by participants	346
2.7.2.7 Corporate Social Investment (CSI) initiatives and ways in which organisations are contributing to a greater purpose.....	347
2.7.2.8 The elements required for effective collaboration in organisations ..	348
2.7.2.9 The elements that contribute to participants' personal meaning in life	349
2.7.2.10 Characteristics that describe non-spiritual work environments	350
3 CONTRIBUTIONS OF THIS STUDY	351
3.1 SCIENTIFIC CONTRIBUTION OF THE RESEARCH	351
3.2 PRACTICAL IMPLICATIONS FOR PRACTITIONERS.....	354
4 LIMITATIONS TO THE STUDY	356
5 RECOMMENDATIONS FOR FUTURE RESEARCH.....	360
5 CONCLUSION.....	362
 REFERENCES	 366
APPENDIX A: PERMISSION LETTER	462
APPENDIX B: INTRODUCTION TO STUDY AND INFORMED CONSENT FOR RESEARCH SURVEY.....	466
APPENDIX C: INTRODUCTORY E-MAIL AND INFORMED CONSENT FOR SECOND SAMPLING PHASE.....	469
APPENDIX D: RESEARCH QUESTIONNAIRE	472
APPENDIX E: INVITATION E-MAIL FOR PARTICIPATION IN FOLLOW-UP INTERVIEW	483
APPENDIX F: SEMI-STRUCTURED INTERVIEW QUESTIONS.....	485
APPENDIX G: LIST OF DEMOGRAPHIC VARIABLES FOR ANOVA.....	487

APPENDIX H: NVIVO COMPLETE CODE BOOK FOR QUALITATIVE DATA

ANALYSIS	491
-----------------------	------------

LIST OF TABLES

Table 1: Abbreviations used in this thesis.....	18
Table 2: Thoughts, attitudes, emotions and behaviours that reflect spirituality	30
Table 3: Definitions of spirituality	34
Table 4: Measurement scales that measure individual spirituality (IS)	51
Table 5: Definitions of workplace spirituality/organisational spirituality	64
Table 6: Measurement scales that measure organisational spirituality (OS)	70
Table 7: Measurement scales that measure spirit at work (SAW)	85
Table 8: Survey response rates	122
Table 9: Interviewee identification and status	125
Table 10: Response rate of interview requests.....	126
Table 11: Final form of the Human Spirituality Scale (HSS)	129
Table 12: Seniority level/position distribution of respondents	143
Table 13: Gender distribution of respondents.....	144
Table 14: Ethnicity of respondents.....	145
Table 15: Age distribution of respondents.....	146
Table 16: Marital status of respondents.....	147
Table 17: Qualifications of respondents.....	148
Table 18: Number of years with current employer	149
Table 19: Respondents who have made substantial career changes.....	150
Table 20: Satisfaction with career progression	151
Table 21: Happiness at work	152
Table 22: Respondents who would continue to work after winning the lottery	153
Table 23: Respondents who would continue to work at the same organisation after winning the lottery	154
Table 24: Importance of work	155
Table 25: Importance of service to others.....	156
Table 26: Importance of relationships with co-workers	157
Table 27: Importance of relationship with supervisor	158

Table 28: Importance of relationships with subordinates	159
Table 29: Quality of relationships with co-workers.....	160
Table 30: Quality of relationships with supervisor.....	161
Table 31: Quality of relationships with subordinates.....	162
Table 32: Importance of family.....	163
Table 33: Importance of friends	164
Table 34: Quality of relationships with family	165
Table 35: Quality of relationships with friends.....	166
Table 36: Religious orientations of respondents	167
Table 37: Strength of religious convictions	168
Table 38: Importance of religion	169
Table 39: Description of Interviewees.....	182
Table 40: Eigen values of the PAF	188
Table 41: Pattern matrix from oblimin rotation with kaiser normalisation	190
Table 42: Factor correlation matrix	192
Table 43: Standardised regression weights for three-factor CFA Model 1 for HSS	195
Table 44: Modification indices for three-factor CFA Model 1 for HSS.....	196
Table 45: Fit Indices for three-factor CFA Model 1 for HSS.....	198
Table 46: Comparison of fit indices for three-factor CFA Models 1 and 2 for HSS	198
Table 47: Comparison of fit indices for three-factor CFA Models 1, 2 and 3 for HSS ...	199
Table 48: Comparison of fit indices for three-factor CFA Models 1, 2, 3 and 4 for HSS	200
Table 49: Comparison of fit indices for three-factor CFA Models 1, 2, 3, 4 and 5 for HSS.....	201
Table 50: Standardised regression weights for one-factor CFA Model 1 for HSS	202
Table 51: Modification indices for one-factor CFA Model 1 for HSS	203
Table 52: Fit Indices for one-factor CFA Model 1 for HSS	204
Table 53: Comparison of fit indices for one-factor CFA Models 1 and 2 for HSS	205
Table 54: Comparison of fit indices for one-factor CFA Models 1, 2 and 3 for HSS	206
Table 55: Comparison of fit indices for one-factor CFA Models 1, 2, 3 and 4 for HSS .	206
Table 56: Comparison of fit indices for one-factor CFA Models 1, 2, 3, 4 and 5 for HSS.....	207
Table 57: Comparison of fit indices between three-factor CFA Model 5 and one-factor CFA Model 5	208
Table 58: Standardised regression weights for three-factor CFA Model 1 for OSVS....	210

Table 59: Modification indices for three-factor CFA Model 1 for OSVS	211
Table 60: Fit Indices for three-factor CFA Model 1 for OSVS	212
Table 61: Comparison of fit indices for three-factor CFA Models 1 and 2 for OSVS.....	213
Table 62: Comparison of fit indices for three-factor CFA Models 1, 2 and 3 for OSVS.	214
Table 63: Comparison of fit indices for three-factor CFA Models 1, 2, 3 and 4 for OSVS	214
Table 64: Standardised regression weights for one-factor CFA Model 1 for OSVS	215
Table 65: Modification indices for one-factor CFA Model 1 for OSVS	216
Table 66: Fit Indices for one-factor CFA Model 1 for OSVS	217
Table 67: Comparison of fit indices for one-factor CFA Models 1 and 2 for OSVS.....	218
Table 68: Comparison of fit indices for one-factor CFA Models 1, 2 and 3 for OSVS...	219
Table 69: Comparison of fit indices for one-factor CFA Models 1, 2, 3 and 4 for OSVS	220
Table 70: Comparison between three-factor CFA Model 4 and one-factor CFA Model 4 for OSVS	220
Table 71: Standardised regression weights for four-factor CFA Model 1 for SAW	223
Table 72: Modification indices for four-factor CFA Model 1 for SAW	224
Table 73: Fit Indices for four-factor CFA Model 1 for SAW	225
Table 74: Comparison of fit indices for four-factor CFA Models 1 and 2 for SAW	226
Table 75: Standardised regression weights for one-factor CFA Model 1 for SAW.....	227
Table 76: Modification indices for one-factor CFA Model 1 for SAW	228
Table 77: Fit Indices for one-factor CFA Model 1 for SAW	229
Table 78: Comparison of fit indices for one-factor CFA Models 1 and 2 for SAW.....	230
Table 79: Comparison of fit indices for one-factor CFA Models 1, 2 and 3 for SAW.....	231
Table 80: Comparison of fit indices for one-factor CFA Models 1, 2, 3 and 4 for SAW.	231
Table 81: Comparison between four-factor CFA Model 2 and one-factor CFA Model 4 for SAW	232
Table 82: Standardised regression weights for three-factor CFA for UWES.....	234
Table 83: Modification indices for three-factor CFA for UWES	235
Table 84: Fit Indices for three-factor CFA for UWES	236
Table 85: Standardised regression weights for one-factor CFA for AOCS	238
Table 86: Modification indices for one-factor CFA for AOCS.....	239
Table 87: Fit Indices for one-factor CFA for AOCS.....	239
Table 88: Fit Indices for model 1	245

Table 89: Regression weights for model 1	246
Table 90: Standardised regression weights for model 1	247
Table 91: Covariance statistics for model 1	248
Table 92: Correlation statistics for model 1	248
Table 93: Fit Indices for model 1A	250
Table 94: Regression weights for model 1A	250
Table 95: Fit Indices for model 1B	251
Table 96: Regression weights for model 1B	252
Table 97: Fit Indices for model 2.....	253
Table 98: Regression weights for model 2.....	254
Table 99: Standardised regression weights for model	254
Table 100: Covariance statistics for model 2	255
Table 101: Correlation statistics for model 2.....	255
Table 102: Summary of ANOVA procedure run on IS and 15 demographic variables..	257
Table 103: t-test results for IS and involvement in decision-making	258
Table 104: t-test results for IS and supervisor support	258
Table 105: t-test results for IS and gender.....	259
Table 106: t-test results for IS and ethnicity.....	259
Table 107: t-test results for IS and strength of religious convictions	260
Table 108: Summary of ANOVA procedure run on OS and 15 demographic variables	261
Table 109: t-test results for OS and organisational support	262
Table 110: t-test results for OS and recognition and reward.....	262
Table 111: t-test results for OS and involvement in decision-making	263
Table 112: t-test results for OS and gender.....	264
Table 113: t-test results for OS and religious orientation	264
Table 114: Summary of ANOVA procedure run on SAW and 15 demographic variables	265
Table 115: t-test results for SAW and organisational support	266
Table 116: t-test results for SAW and opportunities for advancement	267
Table 117: t-test results for SAW and a substantial career change	267
Table 118: t-test results for SAW and career satisfaction	268
Table 119: t-test results for SAW and happiness at work	269
Table 120: t-test results for SAW and religious orientation	270
Table 121: t-test results for SAW and strength of religious convictions.....	270

Table 122: Interview questions and factors they pertain to	272
Table 123: Interviewees' scores for each of the spirituality instruments	274
Table 124: Initial codes generated during first phase of coding	276
Table 125: Code families created during axial coding	281
Table 126: Axial code 'How to treat people in organisations'	284
Table 127: Axial code 'Characteristics of Spiritual Work Environments'	292
Table 128: Axial code 'Compassion'	299
Table 129: Axial code 'Energy and Vigour'	302
Table 130: Axial code 'Connection'	305
Table 131: Axial code 'Core Values'	308
Table 132: Axial code 'CSI initiatives and contributions to a greater purpose'	311
Table 133: Axial code 'Collaboration'	314
Table 134: Axial code 'Personal Meaning'	316
Table 135: Axial code 'Characteristics of Non-Spiritual Work Environments'	319

LIST OF FIGURES

Figure 1: Relationship between IS, OS and SAW	21
Figure 2: Relationship between IS, OS and SAW and the resultant impact on WE	21
Figure 3: Relationship between IS, OS and SAW and the resultant impact on OC	22
Figure 4: Different paths to spirit at work	81
Figure 5: Seniority level/position distribution of respondents	143
Figure 6: Gender distribution of respondents	144
Figure 7: Ethnicity of respondents	145
Figure 8: Age distribution of respondents	146
Figure 9: Marital status of respondents	147
Figure 10: Qualifications of respondents	148
Figure 11: Number of years with current employer	149
Figure 12: Respondents who have made substantial career changes	150
Figure 13: Satisfaction with career progression	151
Figure 14: Happiness at work	152
Figure 15: Respondents who would continue to work after winning the lottery	153
Figure 16: Respondents who would continue to work at the same organisation after	

winning the lottery	154
Figure 17: Importance of work	156
Figure 18: Importance of service to others.....	157
Figure 19: Importance of relationships with co-workers	158
Figure 20: Importance of relationship with supervisor.....	159
Figure 21: Importance of relationships with subordinates.....	160
Figure 22: Quality of relationships with co-workers.....	161
Figure 23: Quality of relationships with supervisor.....	162
Figure 24: Quality of relationships with subordinates.....	163
Figure 25: Importance of family	164
Figure 26: Importance of friends	165
Figure 27: Quality of relationships with family.....	166
Figure 28: Quality of relationships with friends	167
Figure 29: Religious orientations of respondents.....	168
Figure 30: Strength of religious convictions	169
Figure 31: Importance of religion	170
Figure 32: Relationship between IS, OS and SAW.....	187
Figure 33: Scree Plot of the PAF	189
Figure 34: HSS three-factor model diagram	194
Figure 35: OSVS three-factor model diagram.....	209
Figure 36: SAW four-factor model diagram.....	222
Figure 37: UWES three-factor model diagram	233
Figure 38: AOCS one-factor model diagram.....	237
Figure 39: Spirituality constructs and work engagement.....	242
Figure 40: Spirituality constructs and organisational commitment	243
Figure 41: Model 1A – Impact of individual spirituality on work engagement.....	249
Figure 42: Model 1B – Impact of organisational spirituality on work engagement	251

CHAPTER 1

RESEARCH PROBLEM AND CONTEXT

“Within each individual lies the need for meaning – the longing to be of value. This craving for purpose propels us to make the choices that will bring us the most joy and satisfaction from life” (Covey, 2006, p. 2)

1 INTRODUCTION

1.1 BACKGROUND

Organisations became an accepted area of inquiry for the social sciences during the 1950's (Scott, 2004). During this time, the field of Organisational Behaviour (OB) emerged as an academic field of interest. Introductory textbooks on OB define it as an interdisciplinary field of study (Schermerhorn, Hunt, Osborn, & Uhl-Bien, 2011) focused on understanding the behaviour of people in organisations and how their behaviour affect organisational performance (Robbins, Judge, Millett & Boyle, 2011). OB is dedicated to an enhanced understanding of people for improved organisational and management practices (Kreitner & Kinicki, 2001). To achieve this objective, behaviour should be studied holistically (Van der Walt, 2007).

From a holistic perspective, human beings constitute complex systems consisting of various subsystems or dimensions – physical, psychological (including cognitive and emotional dimensions) and spiritual (Hudson, 2014; Stebbins, 2010; Suárez, 2015). While organisational behaviour literature had examined the physical, emotional and cognitive facets of life extensively, very little attention was initially paid to spiritual and existential issues (De Klerk, Boshoff & Van Wyk, 2006; Sprung, Sliter & Jex, 2012). However, spiritual issues have received much more research attention since the year 1999 (Anderton, 2012; Dandona, 2013; Daniel, 2010; Ferreira Vasconcelos, 2013; Heinsohn, 2012; Kendall, 2012; Phipps, 2012;

Saks, 2011; Sprung et al., 2012; Van der Walt & De Klerk, 2014a, 2014b). The interest in spirituality continues to grow and has expanded well beyond the personal realm into the professional arena (Anderton, 2012; Phipps, 2012).

1.1.1 **Evolution of the world of work**

The advent of scientific management during the industrial revolution had the effect of detracting from the individuality of employees. Workers became “*part of the plant just like the machines*” (Statt, 2004, p. 11). The emergence of engineering signalled the standardisation of work processes and the institutional pursuit of innovation. Product line workers became replaceable parts in a mechanistic process (Geh & Tan, 2009). Work specialisation, repetitive tasks and the hierarchical division of tasks (Gratton, 2011), led to boredom and a sense of isolation and alienation among workers (Geh & Tan, 2009). The employer-employee relationship was one of inducement–contribution exchange: money was exchanged for physical labour. All assumptions underlying employee motivation were economically-based (Geh & Tan, 2009). The scientific approach to management therefore expected employees to complete their allotted tasks without involving other dimensions of their self (Ackers & Preston, 1997).

According to Gratton (2011) the contemporary world of work suggests a reversing of these trends away from hierarchies and towards collaboration, where the individual will once again be allowed to bring his/her whole self to work. The workplace is being rediscovered as a source of spiritual growth and community due to the decline in churches, social groups and extended families where people used to experience connection with others (Anderton, 2012; Ferreira Vasconcelos, 2013). With people spending more of their time at work (Geldenhuis, Łaba, & Venter, 2014; Hoffman, 2010; Van Zyl, Deacon & Rothmann, 2010), the workplace has become their most significant community (Geldenhuis et al., 2014) and people are seeking more than mere economic compensation for their work (Ahmad & Omar, 2015; Anderton, 2012; Ferreira Vasconcelos, 2013).

Corporate restructuring, waves of downsizing and an increase in staff turnover and temporary contract workers have led to insecure, dissatisfied, angry and less loyal employees (Heinsohn, 2012; Kendall, 2012; Marschke et al., 2011). For many, the workplace does not provide opportunities for growth. Rather, the workplace is experienced as a place of deep misery characterised by fear and impermanence (Adams, Snyder, Rand, King, Sigmon & Pulvers, 2003; Geh & Tan, 2009; Kendall, 2012). As a result, there is an increased need for connectedness, meaning, purpose, nurturance and hope in work and in the workplace (Anderton, 2012; Geldenhuys et al., 2014; Tombaugh, Mayfield & Durand, 2011). People no longer want to compartmentalise their lives into separate work and life domains (Bullen, 2011/2012; May, 2014; Sendjaya, 2015). People want more from work than just money; they also want to feel like they are making a positive contribution to the world (Anderton, 2012; Geldenhuys et al., 2014; Marschke et al., 2011). The general population is realising that above a certain threshold required for survival, money does little to contribute to overall wellbeing and happiness (Geldenhuys et al., 2014; Harari, 2014).

For many, work has now become the centrepiece of their lives (Geh & Tan, 2009; Geldenhuys et al., 2014; Kendall, 2012). Work is the place where most people now seek to find a sense of meaning or purpose. The secular workplace has become the platform for finding and expressing the sacred within us (Geldenhuys et al., 2014; Kendall, 2012). As De Klerk et.al. (2006) state, if any significant personal transformation is to take place, then it is highly likely that it might take place at work. The workplace is where people are searching for ways to integrate their work lives with their spiritual lives in order to leave a legacy that speaks beyond just putting in an eight-hour day (Bullen, 2011/2012; Marschke et al., 2011).

Bullen (2011/2012) believes that the demand to live a meaningful life has become a powerful driver of our economy. People are seeking meaningful work that allows for learning and development and that provides a sense of competence or mastery (Anderton, 2012; Ferreira Vasconcelos, 2013; Heinsohn, 2012; Kendall, 2012). They want to be useful and to be understood by others (Strack, Fottler, Wheatley & Sodomka, 2002). They want to experience a sense of connection to people at work and in their community (Ashmos & Duchon, 2000;

Pfeffer, 2010) and they want to be able to live an integrated life where work is a natural part of human life (Pfeffer, 2010).

For these reasons, researchers can no longer avoid studying organisations as spiritual entities (Geh & Tan, 2009; Geldenhuys et al., 2014; Pfeffer, 2010). Konz and Ryan (1999) state that organisations are evolving. They are no longer merely there for economic gain. They now offer a platform for social activity and the opportunity for spiritual development. In Bullen's (2011/2012) view, companies who are able to respond to the demands of a contemporary world of work will become the new business leaders.

1.1.2 Spirit and spirituality

Mitroff and Denton (1999), offered the first large-scale empirical study of the phenomenon of spirituality at work. Since then, there has been a growing interest in spirituality and its effects on and in the workplace. This has led to attempts to critically evaluate this concept (Cavanagh, 1999; Sass, 2000), synthesise our knowledge on the topic and evaluate its utility scientifically (Giacalone & Jurkiewicz, 2004; Kinjerski & Skrypnek, 2006a). Several authors have called for more empirical validation of constructs related to workplace spirituality and their correlation to organisational behaviour variables (Bell-Ellis, Jones, Longstreth & Neal, 2015; De Klerk et.al., 2006; Geh & Tan, 2009; Kendall, 2012; Parboteeah & Cullen, 2010; Rego & Cunha, 2008; Van der Walt & De Klerk, 2014a, 2014b). There appears to be a lack of a single universal conceptualisation of the terms *spirit* and *spirituality* (Ferreira Vasconcelos, 2013; Garcia-Zamor, 2003; Hollins, 2005; Tuck, 2004).

Spirit is a difficult concept to define since it is a construct that is abstract, highly subjective and transcendent (Kinjerski & Skrypnek, 2004; Klenke, 2003). On the whole, spirit is considered to be the vital, life-giving force (or energy) within us while spirituality is the outward expression of the fruits of spirit (Dehler & Welsh, 2010; Fairholm, 1996; Hawkins, 2002). Spirit affects our values, our memories and our understanding of ourselves. It encompasses our inner wisdom and authority (Fairholm, 1996, p. 11). It is the sense of awareness we carry with

us throughout our entire lives (Prescott, 2000, p. 12), our natural, intrinsic, unchanging inner nature (Maslow, 2011, p. 14).

Spirituality is often equated with or confused with religion (Geh & Tan, 2009; Sprung, Sliter & Jex, 2012). In fact, research in management, spirituality and religion seems to be plagued with definitional disputes that have researchers talking past each other and that are preventing scientific progress in this field (Fornaciari & Lund Dean, 2009; Geh & Tan, 2009; Giacalone & Jurkiewicz, 2010; Tischler, Biberman & McKeage, 2002). The construct spirituality includes concepts like purpose and meaning, transcendence, wholeness, altruism and universality (Cash, 2000; De Klerk et.al., 2006; Fry, Vitucci & Cedillo, 2005) as well as having hope or faith and feeling altruistic love towards the world (Fry 2003). Some of these characteristics are also espoused by certain religions as particular values or traits inherent to their practice. However, many authors contend that there is a distinct difference between religion and spirituality (Giacalone & Jurkiewicz, 2010; Izak, 2009, 2012; King, 2010; Saks, 2011; Sprung et al., 2012).

Religion could be viewed as an abstract belief system with ritual practices (Daaleman & Van de Creek, 2000) whereas spirituality is not dogmatic or bound to a particular belief system. For many individuals, spirituality does not have a religious connotation, but is rather based on their own personal values and philosophy (Milliman, Czaplewski and Ferguson, 2003; Mitroff & Denton, 1999a). For purposes of this study, spirituality will be treated as a construct that is *distinctly separate from religion*. This distinction is discussed further in Chapter 2.

According to Moxley (2000, p. 23) “*spirituality works within us... [but] also works between and among us. It connects us to everything that exists. It is because of the work of the spirituality, that we experience deep communion with others, experience ourselves as part of something much larger, experience connectedness to all of life*”. According to De Klerk et al. (2006, p. 321) three main themes stem from the various definitions of spirituality. Firstly, most definitions recognise the search for existential meaning or purpose. Secondly, there is a particular sense of universality or unity with the universe and thirdly, there is awareness or recognition of a “life force” or something greater than oneself. For purposes of this study,

spirituality is seen as consisting of four critical components: (1) the search for existential meaning or purpose in life – this is often within the larger context of life or the universe; (2) self-transcendence and a need for personal growth; (3) a higher awareness of life, or wisdom or increased knowledge and understanding; (4) compassion, love and the need for interconnectedness with all living things. The assumption in this study is that spirituality can be reflected in both observable behaviours and personal experiences and beliefs. Therefore, it has to be assumed that these four components of spirituality can find expression in different ways.

The first component of spirituality is existential meaning or what De Klerk et.al. (2006, p. 320) call one's "*ontological quest*". Confusion can arise when the idea of meaning in life is applied to the workplace. De Klerk et.al. (2006, p. 322) warn that 'meaning in life' should be clearly distinguished from other related constructs such as the 'meaning of work' and 'meaningful work'. They explain that the 'meaning of work' refers to the sociological role of work in human lives, in other words why people choose to work. 'Meaningful work' refers to working conditions both in the organisation as well as in the nature of the work being done that are conducive to motivation. It includes constructs such as autonomy, responsibility, task significance, work identity and complexity as well as how challenging the work is and the variety of tasks the individual has to complete in their work. Meaning in life can be facilitated through engaging in meaningful work.

Individuals might seek meaning and purpose in their lives through doing meaningful work. Their ontological quest then becomes the personal meaning they derive from the work they do. Alternatively, they might not find their work meaningful and might therefore seek meaning through other activities such as hobbies and interests or volunteering for a purpose or even in their family lives. These individuals who do not feel that their work in particular fulfils their ontological quest, could still find purpose in working since working could enable them to achieve their greater purpose. For example, if their greater purpose in life is to provide for their loved ones or travel the world or to fight for a cause, these individuals might endure negative working conditions because work enables them to care of those they love, or fund

their travel or contribute financially to a cause and thus indirectly contributes to their greater purpose in life.

The second component of spirituality is self-transcendence and personal growth. It is assumed that individuals, who practice spirituality, will seek growth, either through meaningful work that enables them to grow and develop or through other activities that provide them with spiritual growth or an opportunity for self-transcendence (Alexander, 2010; Dehler & Welsh, 2010).

From the third component of spirituality, it seems that spiritual individuals experience a sense of inner peace and calm related to a higher awareness of life and greater understanding or wisdom. It would be interesting to learn how these individuals would express these feelings of inner calm and peace. For instance, they might be less competitive and more cooperative in a working environment, since they are at peace with themselves and therefore might have less need to compete.

Lastly, individuals who practice spirituality will experience interconnectedness to others and in most cases to all living things. Thus, they will show care and compassion towards others. Spiritual individuals, who believe that all living things are connected, will express the desire to protect other living creatures or to preserve nature. They might opt to work for organisations that strive for to be environmentally friendly etc. According to Mitroff and Denton (1999b, p. 89) the key elements of spirituality include: unstructuredness, inclusivity, universality, timelessness, meaning, purpose in life, interconnectedness and inner peace and calm. In their view, one word that best describes the meaning of spirituality is *interconnectedness* (Mitroff & Denton, 1999a, p. xvi; 1999b, p. 83).

1.1.3 Workplace spirituality

Studies on spirituality used to consider spirituality to be a private, personal experience only present on the individual level. However, in the late 1990's and early 2000's researchers started talking about *organisational spirituality* and/or *workplace spirituality*. For example, in

their empirical investigation of workplace spirituality, Milliman et al., (2003) identified three dimensions that they believe characterise workplace spirituality: (1) meaningful work; (2) a sense of community; (3) alignment with organisational values. Ashforth and Pratt (2003) also suggest three dimensions to workplace spirituality: (1) self-transcendence; (2) holism and harmony; (3) growth. According to Sheep (2004) there are four recurring themes that characterise workplace spirituality: (1) self-workplace integration; (2) meaning in work; (3) self-transcendence; (4) personal growth and development.

All three these definitions highlight (1) the need for meaningful work, (2) opportunities for personal growth and development or self-transcendence and (3) the need to integrate into the workplace or make meaningful connections. Despite a number of definitions for workplace spirituality having been proposed (Fornaciari, Sherlock, Ritchie & Dean, 2005; Klenke, 2005), researchers have not reached consensus on a definition of workplace spirituality as yet, leading to vagueness and differences in opinion (Giacalone & Jurkiewicz, 2003c; Kolodinsky, Giacalone & Jurkiewicz, 2004; Polley, Vora & SubbaNarasimba, 2005). This makes it difficult to research the phenomenon (De Klerk, 2005). However, Kinjerski and Skrypnek (2004) believe that the distinction between individual and organisational spirituality in itself is already an important advancement in the study of management, spirituality and religion as it allows for research studies that investigate spirituality as a cultural or organisational phenomenon that could be present on different levels of the organisation.

There are two approaches to investigating workplace spirituality. Firstly, one can investigate the utility of individual spirituality by looking at its impact on performance measurement, turnover and productivity in the workplace. Alternatively, the *systemic view* of workplace spirituality sees spirituality as a dynamic force that is interwoven with all other aspects of life – values, culture and organisational life. This means that spirituality is not simply viewed as an individual phenomenon but rather as something that can be understood and therefore studied on different levels – individual, group and organisational (Giacalone & Jurkiewicz, 2010).

A researcher following the *systemic* approach to workplace spirituality should investigate how spirituality is experienced on the individual, group and organisational level. From this

perspective, spirituality is no longer a private, intra-personal matter, but rather an interpersonal phenomenon and a matter of culture. If spirituality is perceived as a particular type of culture within the workplace, it also means that spirituality could affect work outcomes. Spirituality is seen as a product of social interaction and collaborative meaning-making (Grant, 2005). Giacalone and Jurkiewicz (2010) posit that greater congruence across the different levels of the organisation will ensure a greater possibility that individuals will be able to experience transcendence through their work. Thus, it becomes necessary to investigate the interplay between individual and organisational spiritual values (Kolodinsky, Giacalone & Jurkiewicz, 2008) to determine whether organisational spirituality influences individual spirituality and/or vice versa.

The general thrust of research on workplace spirituality has focused on individuals rather than organisations (Bell-Ellis et al., 2015; Daniel, 2010; Geh & Tan, 2009; Kendall, 2012; Kolodinsky et al., 2008; Tombaugh et al., 2011). A review of the literature on spirituality reveals a lack of consistency or agreement on the level of analysis for spirituality. Some authors treat spirituality as an individual phenomenon while others view it as an organisational dynamic or culture (Geh & Tan, 2009; Phipps, 2012). According to Kolodinsky et al. (2008) the reason for this is based on researchers' perspective on the meaning of the construct workplace spirituality. They argue that three distinct conceptual understandings of workplace spirituality are possible.

On the *individual level*, workplace spirituality could be viewed as the incorporation of one's own spiritual ideals and values in the work setting. This represents the application of personal/individual spirituality (IS) in the workplace. This view of workplace spirituality assumes that employees' personal, spiritual values will have an effect on how they behave and how well they perform at work (Kolodinsky et.al., 2008). It is important to note here that individuals who discover personal spirituality but find themselves working in non-spiritual organisations might actually feel less satisfied with and committed to their jobs as a result.

If a researcher follows the individual perspective on workplace spirituality, he/she would simply look at how individual spirituality i.e. the need for meaning, for personal growth and

interconnectedness plays out in the individual's work and engagement as well as their productivity and level of commitment to their work and organisation. The assumption would therefore be that individuals who are spiritual, would perform better than individuals who are not spiritual. Studies of individual spirituality therefore only require testing the spirituality of individuals in the organisation and how their level of individual spirituality then impacts on specific work outcomes.

However, workplace spirituality could also be studied from a *macro-level perspective*. This level would incorporate corporate culture or climate. From this perspective, there should be congruence between the values of the individual and those of the organisation. A study that follows the macro perspective on workplace spirituality would also have to investigate employees' perceptions of the organisational environment to determine if they perceive said value congruence. Given that the relationship between values and organisational culture and their impact on various work outcomes are well established (Deal & Kennedy, 1982; Meglino, Ravlin & Adkins, 1989), employees views of their organisations and the level of organisational spirituality in the work environment, would most likely impact on attitudes, behaviour, job satisfaction and organisational performance (Kolodinsky *et.al.*, 2008). Whether employees perceive their organisations as spiritual or not will therefore determine the success rate of organisational attempts at organisational spirituality.

The macro-level perspective on workplace spirituality therefore explores two dimensions of spirituality, i.e. how the individual expresses his/her spirituality (i.e. IS) and also how the organisation expresses spirituality (i.e. OS) and whether there is an alignment of values between individuals and organisations. The assumption here is therefore that those individuals who experience congruence with the values of the organisation will perform better than those individuals who do not perceive value congruence. The researcher assumes that the organisation would therefore determine the level of workplace spirituality since spirituality then becomes a matter of organisational culture.

A third perspective on workplace spirituality views it as an *interactive relationship* between individual spirituality (IS) and organisational spirituality (OS). From this perspective workplace

spirituality represents the interaction between individuals' personal spiritual values and behaviours (i.e. IS) and the organisation's spiritual values and practices (i.e. OS). Understanding the impact of spirituality on work, is therefore not simply understanding individual spirituality on the micro level or organisational spirituality on the macro level, but rather understanding the *relationship* between these two components (Kolodinsky *et.al.*, 2008, p. 467). From this perspective, the relationship could move in any direction and the question the researcher is left pondering is: does the level of individual spirituality determine the level organisational spirituality or does the level of organisational spirituality determine the level of individual spirituality? In other words, what is the direction of the relationship between IS and OS?

1.1.4 The experience of spirit at work

It seems that there is a difference between the organisational environment that makes the workplace more meaningful (i.e. organisational spirituality) and the actual *experience* of spirit whilst at work or working. This is similar to the distinction between meaningful work and meaning in work as mentioned above. Where organisational spirituality refers to the spiritual nature or culture of the organisation, spirit at work refers to experiences at work that are spiritual in nature. These experiences can happen to both individuals in the workplace or work teams in the workplace. Thus, organisational spirituality relates to characteristics of spiritual organisations whereas spirit at work relates to subjective experiences that are characterised by certain cognitive and emotional states.

According to Kinjerski and Skrypnek (2004, p. 27) spirit at work describes “*the experience of employees who are passionate about their work, feel they can express their complete selves at work, and feel connected to those with whom they work*”. Kinjerski and Skrypnek (2004, p. 32) found that when individuals were engaged in work they found meaningful, they experienced “*a natural high*”, or total bliss, joy and wellbeing. This is similar to the state of *flow* described by Csikszentmihalyi (1988, 2008). People who experience spirit at work, report that they enjoy their work and they feel they can be authentic at work. They believe that their work really matters and that they are making a difference through the work they are doing.

They experience a strong sense of connection to others and an awareness to something larger than themselves (Kinjerski & Skrypnek, 2004). Spiritual experiences at work seem to have a mystical quality that is described as “*perfection, or living in the moment, or effortless energy*” (Kinjerski & Skrypnek, 2004, p. 27). During these mystical experiences, individuals have no sense of time and space. They simply enjoy the moment (Kinjerski & Skrypnek, 2006a).

1.1.5 Workplace spirituality and other work outcomes

According to Heinsohn (2012) most of the writing on workplace spirituality over the past two decades has been anecdotal, conceptual and theoretical in nature. Lund Dean et al. (2003) have argued for the grounding of studies on workplace spirituality in organisational science to illustrate its value in the workplace. Giacalone and Jurkiewicz (2003, p. 21) concur with this, highlighting the importance of integrating spirituality specifically with organisational behaviour (OB). They postulate that the study of spirituality and how it relates to OB should be focused on the pivotal question: “*Is spirituality significantly related to various aspects of organizational behavior and performance and if so, how?*”

Although the study of workplace spirituality still appears to be in the formative stages of its development (Bell-Ellis et al., 2015), some ground-breaking studies have confirmed significant correlations between spirituality and positive work outcomes (Kendall, 2012; Van der Walt & De Klerk, 2014b). Significant correlations have been established between workplace spirituality and organisational performance (Geh & Tan, 2009; Neck & Milliman, 1994; Thompson, 2000), organisational commitment (Bell-Ellis et al., 2015; Rego & Cunha, 2008), job involvement, organisational identification, work satisfaction (Milliman et al., 2003; Kolodinsky et al., 2008), work motivation and career commitment (De Klerk et al., 2006), ethics (Giacalone & Jurkiewicz, 2003), emotional intelligence, self-efficacy (Beazley, 1997; Hartsfield, 2003), intrinsic, extrinsic and total work rewards (Kolodinsky et al., 2004, 2008), employee performance, organisational effectiveness (Karakas, 2010), leadership (Nooralizad et al., 2011; Phipps, 2012), work values, work ethic (Issa & Pick, 2011), and social justice (Prior & Quinn, 2012). Csiernik and Adams (2002) demonstrated that workplace spirituality

contributes to wellness by counteracting stress. These relationships consistently confirm that higher levels of spirituality enhance mental wellness and that it is appropriate to study organisations and their members from a spiritual perspective.

On the other hand, lower levels of spirituality have also been found to be negatively correlated with negative phenomena such as loneliness (Ellison, 1983), negative moods (Fehring et al., 1987), end-of-life despair, desiring hastened death, suicidal ideation (McClain et al., 2003), as well as an individual's intention to quit (Milliman et al., 2003). These findings indicate the significant and positive role that spirituality plays in a person's psychological well-being. This relationship is confirmed by De Klerk (2005) and De Klerk et al. (2006), who indicate how meaning in life relates to almost every aspect of psychological wellbeing. Due to the centrality of work in people's lives, meaning in life may be achieved through a person's work. A person's work, if spiritually meaningful and fulfilling, could therefore enhance a person's personal wellbeing (Van Der Walt & De Klerk, 2014b).

In the last two decades, research has also paid increased attention to the domain of positive psychology which is the scientific study of human strengths and ways to function more optimally (Cherry, 2015; Daniel, 2010; Park, Oates & Schwarzer, 2013; Peterson, 2008; Snyder, Lopez & Pedrotti, 2015). One of the positive states that is gaining increasing research attention is the construct of *work engagement* (Ludwig & Frazier, 2012; Macey, Schneider, Barbera & Young, 2009). Work engagement describes the extent to which workers are involved with, committed to and passionate about the work they do (Research Works, 2009, p. 1). Engaged employees have a "*sense of energetic and effective connection with their work activities, and they see themselves as able to deal well with the demands of their jobs*". It is characterised by three different factors: (1) vigour or energy, (2) dedication or commitment and (3) absorption in the task (Schaufeli, Bakker & Salanova, 2006, p. 702).

In light of the fact that work engagement can lead to greater organisational success, it has become a real concern for organisations. Studies indicate that only a small percentage of employees are actively engaged at work (Lockwood, 2007; Vance, 2006). In fact, Gallup's

2011-2012 study of employees in 142 countries worldwide indicates that only 13 percent of employees around the world are actively engaged at work (Crabtree, 2013).

It seems that the experience of spirit at work could perhaps impact on *work engagement*. In Kinjerski and Skrypnek's 2004 study, individuals who experienced spirit at work expressed profound feelings of wellbeing and reported feeling love for the members of their work teams. This corresponds with the wellbeing approach to conceptualising WE and resonates with the WE factor of vigour or energy. These people felt they could be authentic at work and they believed that their work really mattered. There was a sense of connection to a higher purpose and value congruence between their personal values and those of the organisation. This aligns with the WE dimension of dedication or commitment. Furthermore, these individuals sought opportunities for personal growth and development and wanted to contribute to something greater than themselves. They described having transformative experiences characterised by vitality, energy, bliss, joy and flow whilst working. These experiences echo the WE dimensions of absorption in the task as well as energy or vigour.

Although work engagement is related to *organisational commitment*, these constructs are not the same. Organisational commitment is an individual's psychological attachment to their organisation/employer and refers to *the extent to which the individual identifies with the organisation's goals, objectives and values and is willing to exert effort for the organisation* (Mathieu, & Zajac, 1990; Roberts & Davenport, 2002). Roberts and Davenport (2002, p. 21) explain that *engaged* employees would report that (1) their work makes good use of their skills and abilities; (2) that they find their work challenging and intellectually stimulating and (3) that their work provides them with a sense of personal accomplishment. Those individuals who display high *organisational commitment* however, would (1) recommend their organisation to a friend as a good place to work for; (2) are proud to work for their particular organisation and (3) think their organisation is doing its best to be or become an industry leader (Roberts & Davenport, 2002, p. 21).

For the current study to have value outside of the contribution to the theory development on workplace spirituality, it is useful to also measure the impact or effect of spiritual variables on

particular work outcomes. The researcher selected two positive work outcomes to investigate – work engagement and organisational commitment. Work engagement was selected because of its impact on work performance and its natural link to things like meaningful work and being involved and absorbed in work. Organisational commitment was selected because, although it has been studied extensively in first world countries (Bell-Ellis et al., 2015; Yalabik, Van Rossenberg, Kinnie & Swart, 2015), it has not received the same level of attention in third world countries like South Africa. Furthermore, its relation to workplace spirituality – particularly in the context of a developing economy like South Africa – has not yet received the research attention it deserves.

1.2 DEFINITION OF CONSTRUCTS

This study involves several key constructs, the most important of which are: *spirit*, *spirituality*, *individual spirituality (IS)*, *organisational spirituality (OS)*, *spirit at work (SAW)*, *work engagement (WE)* and *affective organisational commitment (OC)*. The manner in which these key terms are defined for purposes of this studied are outlined below:

Spirit: Spirit is considered to be the vital, life-giving force (or energy) within us (Dehler & Welsh, 1994, 2010; Fairholm, 1996; Hawkins, 2002). Spirit affects our values, our memories and our understanding of ourselves. It encompasses our inner wisdom and authority (Fairholm, 1996, p. 11). It is the sense of awareness we carry with us throughout our entire lives (Prescott, 2000, p. 12), our natural, intrinsic, unchanging inner nature (Maslow, 2011, p. 14).

Spirituality: Spirituality, is viewed as the expression of spirit (Dehler & Welsh, 2010), both through observable behaviour and personal experiences. It consists of four critical components: (1) the search for existential meaning or purpose in life – this is often within the larger context of life or the universe; (2) self-transcendence and a need for personal growth; (3) a higher awareness of life, or wisdom or increased knowledge and understanding; (4) compassion, love and the need for interconnectedness with all living things.

Individual spirituality (IS): Individual spirituality (hereafter referred to as IS for purposes of this study), in the context of work refers to “*the desire of employees to express all aspects of their being at work and to be engaged in meaningful work*” (Kinjerski & Skrypnek, 2004, p. 28). It is about acknowledging that employees have an *inner life* that needs to be *nurtured* through *meaningful work* and *community* with co-workers (Ashmos & Duchon, 2000, p. 137). For purposes of this study, Wheat’s (1991) definition of spirituality is adopted as the definition of IS. Wheat (1991) defines spirituality as consisting of three elements: (1) a larger context in which to view the events of one’s life; (2) an awareness of life and or meaning and purpose in life which translates into feeling a connection with life itself and other living things; (3) compassion for the welfare of others. It is therefore aligned with three of dimensions of spirituality mentioned above – (1) the search for existential meaning in life or larger context; (2) higher awareness of life; (3) compassion and/or interconnectedness.

Organisational spirituality (OS): On the organisational level, spirit at work is about purpose and effective functioning; about congruence between espoused and enacted organisational values (Kinjerski & Skrypnek, 2004). Spiritual organisations are often described as organisations that have ‘soul’. Organisations that have soul embrace both the top line (higher purpose of the organisation) and the bottom line (financial performance) (Kinjerski & Skrypnek, 2004, p. 29). Soulful organisations have organisational cultures that reflect caring leadership and socially responsible and value-driven business practices. These organisations recognise employees’ contributions to the success of the organisation and encourage individual development and wellbeing (Ashmos & Duchon, 2000; Guillory, 2000; Kinjerski & Skrypnek, 2006a, 2008). Thus, organisational spirituality (hereafter referred to as OS for purposes of this study) is the “*integration of humanistic principles, practices and behaviors*” ... and servant leadership ... “*with sound business functioning*” (Guillory, 2000, p. xii) in order to create a work environment that is conducive for experiencing meaningful work, finding and pursuing opportunities for personal growth and development or transcendence and experiencing a connection or sense of common purpose with co-workers and having compassion for others.

Spirit at work (SAW): According to Kinjerski and Skrypnek (2004; 2006b) spirit at work (hereinafter called SAW for purposes of this study) is a distinct experience characterised by four dimensions: (1) engaging work; (2) mystical experience; (3) spiritual connection and (4) sense of community. Engaging work is characterised by profound feelings of well-being, a belief that one is engaged in meaningful work that has a higher purpose, and an awareness of alignment between one's personal values and beliefs and the values expressed by one's work. The second dimension, a mystical or unitive experience, is described as a positive state expressed through feelings of vitality, energy, bliss, joy and flow. Thirdly, spiritual connection is characterised by a sense of connection to something larger than the self. Lastly, a sense of community describes a feeling of connectedness to others and having a common purpose with one's co-workers.

Work engagement: Work engagement (hereafter referred to as WE for purposes of this study) is considered to be the “*opposite of burnout* and yet an *independent construct from burnout*” as it describes the extent to which workers are involved with, committed to and passionate about the work they do (Research Works, 2009, p. 1). Work engagement is “a *positive work-related state of mind*” characterised by three different factors: (1) vigour or energy, (2) dedication or commitment and (3) absorption in the task (Schaufeli et al., 2006, p. 702).

Organisational commitment: The researcher supports the argument that organisational commitment in its truest sense is actually only *affective* organisational commitment. For this reason, the operational definition adopted for organisational commitment in this study, is as follows: *organisational commitment* (hereafter referred to as OC for purposes of this study) is an individual's positive psychological attachment to their organisation/employer and refers to the extent to which the individual identifies with the organisation's goals, objectives and values and is willing to exert effort for the organisation (Mathieu, & Zajac, 1990; Roberts & Davenport, 2002). In this study, when the researcher refers to organisational commitment, she will always be referring to *affective* organisational commitment, which could be defined as a desire to stay with the organisation because the employee experiences feelings of belonging and comfort (Meyer & Allen, 1991).

The following abbreviations will be used in this study:

Table 1: Abbreviations used in this thesis

Abbreviation	Meaning
IS	Individual spirituality
OC	Organisational commitment
OS	Organisational spirituality
SAW	Spirit at work
WE	Work engagement

2 PROBLEM STATEMENT

Given the disagreement among scholars on the definitions for different spirituality constructs, the questions the researcher is left pondering are the following: (1) given the overlapping definitions of individual and organisational spirituality, is there really a significant difference between individual spirituality (IS) and organisational spirituality (OS)? And (2) is there a difference between the expression of either individual or organisational spirituality and the *experience* of spirituality at work? Or are these constructs simply referring to the same thing in different ways?

If one assumes that these constructs are indeed independent constructs, then Kinjerski and Skrypnek's (2004) study suggests that it is possible for individuals to be spiritual and work in organisations that are not spiritual or for organisations to be spiritual, but for individual employees in those organisations to not be spiritual. It is also possible for a particular work team to be spiritual due to the team members being spiritual. At the same time, the organisation might not be spiritual. Just because a particular work team is spiritual, it does not mean that the organisation is spiritual (Kinjerski & Skrypnek, 2004). This is an interesting rationale, since it poses the question as to what would lead to spirit at work. What is not clear, is whether spirit at work simply is an individual, personal experience of spiritual meaning in the work one does. Or does it relate to the community one finds oneself in at work? Could a

spiritual group of people help a team member discover purpose and meaning and consequently spirituality at work? Or does the greater organisation have to emphasise a greater purpose and an integration of and alignment with humanistic principles and practices that demonstrate care, in order for individuals to experience spirituality at work?

Phipps (2012) has called for clarity about at what level of the organisation spirituality is being studied. She states that the field of spirituality has developed to the point that more specific terminology is required to facilitate differentiation among levels of analysis. The third *interactive/relational* level of analysis in workplace spirituality discussed earlier (see page 10 and 11) is the perspective on workplace spirituality that this study takes. However, this study takes it one step further by incorporating a third dimension of spirituality, i.e. the experience of spirit at work (SAW). Assuming that these constructs of spirituality are independent, the nature of the relationship between individual spirituality (IS) and organisational spirituality (OS) as well as the individual and organisational experiences of spirit at work (SAW) needs further exploration.

Another aspect that needs investigation is the impact of the spirituality constructs/variables on two positive work outcomes; work engagement (WE) and organisational commitment (OC). Work engagement appears to be important because of the increased research interest in this construct; the current view that work engagement is critical for obtaining a competitive advantage in the modern world of work and because so few people around the world are actively engaged at work. Organisational commitment is another important positive work outcome construct because, although it has been studied extensively in first world countries (Bell-Ellis et al., 2015; Yalabik, Van Rossenberg, Kinnie & Swart, 2015), it has not received the same level of attention in third world countries like South Africa. Furthermore, its relation to workplace spirituality – particularly in the context of a developing economy like South Africa – has not yet received the research attention it deserves. A positive correlation between any or all of the spirituality constructs/variables and organisational commitment could serve as adequate justification for investing in spirituality in the workplace in whichever form seems most beneficial.

If one or more of these constructs do in fact have a positive impact on work engagement and/or organisational commitment, it would make business sense for an organisation to adopt a spiritual culture and create an environment that fosters the experience of spirit at work in order to gain the competitive benefit of having a more engaged and committed workforce. Hence, a positive impact on WE and OC, would strengthen the business case for workplace spirituality.

In light of some of the studies mentioned that have confirmed significant positive correlations between spirituality and work outcomes, the next important aspect that requires further investigation, is whether particular factors lead to increased spirituality. This seems especially relevant from the anticipated relationships between the variables IS, OS, and SAW and their impact on positive work outcomes such as WE and OC. A better understanding of which individual and organisational factors lead to higher levels of IS, OS and/or SAW could inform organisations about the practical steps they can take to enhance spirituality in the workplace and consequently obtain the benefits of having a more engaged and committed workforce.

3 RESEARCH GOAL

In light of the preceding discussions, the goal of this study is to gain insight into the functioning of spirituality in the workplace and the potential correlation of spirituality with specific positive work outcomes. This is achieved by investigating the relationships between *individual spirituality* (IS), *organisational spirituality* (OS) and the *experience of spirit at work* (SAW) and how these variables contribute collectively or individually to *work engagement* (WE) and *affective organisational commitment* (OC). However, due conceptual proximity in the definitions of IS, OS and SAW, and the lack of singular definitions for these constructs, it is important to assess whether there is construct redundancy between them. Figure 1 illustrates the relationships between IS, OS and SAW that need to be tested for their independence and/or overlap.

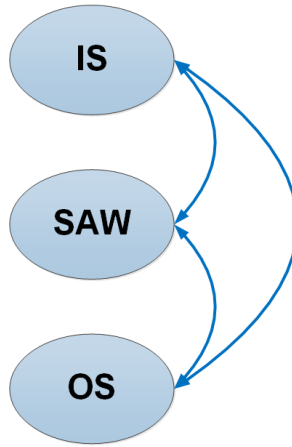


Figure 1: Relationship between IS, OS and SAW

As noted, the main aim of the study is gaining insight into the functionality of the different constructs of spirituality in the workplace and their potential relationship with WE and OC. The logic of the relationships between IS, OS and SAW and their individual and combined resultant impact on WE and OC respectively, are represented in Figures 2 and 3.

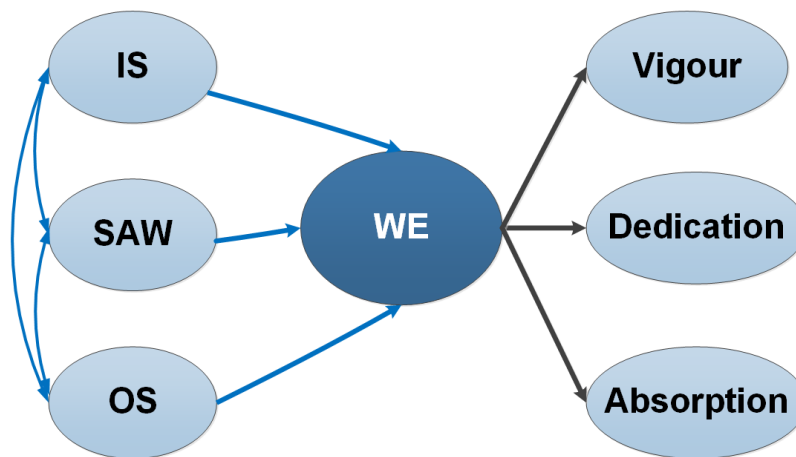


Figure 2: Relationship between IS, OS and SAW and the resultant impact on WE

Figure 2 illustrates that the relationship between IS, OS and SAW is unclear and could potentially move in any direction. These variables either collectively or individually impact on WE. WE consists of three factors – (1) vigour; (2) dedication and (3) absorption.

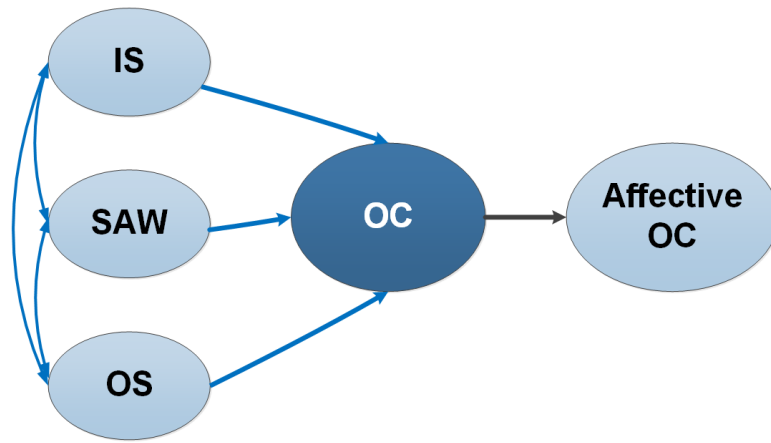


Figure 3: Relationship between IS, OS and SAW and the resultant impact on OC

Figure 3 illustrates that the relationship between IS, OS and SAW is unclear and could potentially move in any direction. These variables either collectively or individually impact on OC. OC consists just one factor – *affective organisational commitment* since only this dimension of Meyer and Allen’s (1991) three-component model of organisational commitment is considered true organisational commitment for purposes of this study.

3.1 RESEARCH OBJECTIVES

The proposed study will therefore be guided by the following specific research objectives:

1. To explore the relationships between individual spirituality (IS), organisational spirituality (OS) and the experience of spirit at work (SAW).
2. To determine the nature and possible direction of the relationship between individual spirituality (IS), organisational spirituality (OS) and the experience of spirit at work (SAW).
3. To determine how individual spirituality (IS), organisational spirituality (OS) and the experience of spirit at work (SAW) contribute, either collectively or individually, to positive work outcomes such as work engagement (WE) and affective organisational commitment (OC).
4. To explore contributing variables other than individual spirituality (IS), organisational spirituality (OS) and the experience of spirit at work (SAW) that might affect the relationship between these variables.

3.2 RESEARCH QUESTIONS

Certain research questions emanate from the research objectives listed above:

1. Is there construct redundancy between IS, OS and SAW?
2. To what extent do correlations exist between IS, OS and SAW?
3. What is the relationship between IS, OS and SAW?
4. To what extent do IS, OS and/or SAW contribute collectively or individually to WE?
5. To what extent do IS, OS and/or SAW contribute collectively or individually to affective OC?
6. What are the variables that contribute to IS, OS and/or SAW and their respective roles in WE or OC?
7. What are the individual and organisational factors that contribute to IS, OS and/or SAW?

4 RESEARCH METHODOLOGY

A sequential mixed methods approach was utilised to conduct the research in this study. More specifically, the researcher followed a “between methods” approach by drawing on both quantitative and qualitative data collection procedures (De Vos et.al., 2005, p. 357) – i.e. surveys and semi-structured interviews. Utilising both quantitative and qualitative methods allowed for a more complete analysis of the research situation (Greene, Cacrelli & Graham, 1989; Tashakkori & Teddlie, 1998) and a deeper understanding of the nature of the relationship(s) between the different spirituality constructs. Furthermore, it allowed for triangulation of results.

The quantitative and qualitative measures utilised for this study, were applied sequentially, starting with surveys (quantitative phase) and then following up the findings from the surveys with semi-structured interviews (qualitative phase) to gain insight into the ‘why’ and ‘how’ of the correlations found during the quantitative phase. This enabled the researcher to elaborate on and broaden the findings of one method with another (Creswell, 2009) and ensure richer interpretations of the relationship(s) between the variables.

5 THESIS STRUCTURE

The critical variables in this study are *individual spirituality (IS)*, *organisational spirituality (OS)*, *the experience of spirit at work (SAW)*, *work engagement (WE)* and *organisational commitment (OC)*. Chapter 2 of this thesis is the literature review. The purpose of the literature review is to define all the critical constructs in this study; to identify measurement instruments that have been used in other studies to measure these constructs and to discuss the most important research studies on individual and workplace spirituality to date. Work engagement and organisational commitment will also be defined and distinguished from other psychological work outcomes. The theoretical and conceptual links between spirituality and these constructs will be highlighted.

Chapter 3 consists of a description and explanation of the research paradigm and research methodology applied in this research project. In this chapter various topics are discussed, including sample selection, collection of data and analysis of data. In Chapter 4, the quantitative results to this study are described, analysed and interpreted. In Chapter 5, the qualitative results to this study are described, analysed and interpreted. Chapter 6 consists of a discussion of the research questions. Conclusions are drawn and possible recommendations for business practice and future research are made, based on the research findings.

CHAPTER 2

LITERATURE REVIEW

“Spirituality helps us in our struggle to determine who we are (our being) and how to live our lives in this world (our doing). It combines our basic philosophy towards life, our vision and our values, with our conduct and practice. Spirituality encompasses our ability to tap into our deepest resources, that part of ourselves which is unseen and mysterious, to develop our fullest potential. Both this inward and outward journey gives us the opportunity to discover and articulate our personal meaning and purpose in life” (Howard & Welbourn, 2004, p. 35).

The purpose of Chapter 2 is to provide a literature review of the key constructs in this study. The literature review consists of six major themes: (1) define spirit and spirituality and distinguish spirituality from religion (2) define individual spirituality, identify measurement instruments that measure individual spirituality and discuss IS as an important workplace construct; (3) define workplace spirituality and/or organisational spirituality, provide an overview of the extant literature on OS, discuss OS as an important workplace construct as well as identify measurement instruments that measure the construct; (4) identify the factors that characterise the experience of spirit at work and the measurement instruments that measure the experience of spirit at work and discuss SAW as an important workplace construct; (5) define work engagement, explain how work engagement differs from other psychological constructs and discuss WE in relation to the three spirituality constructs; (6) define organisational commitment and discuss the dimensions of organisational commitment in relation to the three spirituality constructs.

1 SPIRITUALITY AND THE WORLD OF WORK

Since the industrial era, business and the world of work has changed. Work environments are becoming less hierarchical and more flexible and employees are crying out for more meaningful work and a sense of community in their workplaces. Some researchers (see Ferreira

Vasconcelos, 2013; Geh & Tan, 2009; Giacalone & Jurkiewicz, 2010; Kendall, 2012) argue that these gradual changes emanate from a shift in societal values globally which has resulted in increased social consciousness and spiritual awareness (see the Zeigeist Movement in this regard). Contemplating this shift in societal values, Giacalone and Jurkiewicz (2010) draw a distinction between *materialism* and *post-materialism* and postulate that the increased interest in workplace spirituality recently, is due to a shift in societal values away from mere materialism towards post-materialism.

Materialists value economic growth and maintaining order in society. They express concerns for prosperity, security and control (Brown, 2003; Daniel 2010; Inglehart, 1977). *Post-materialists*, on the other hand, prioritise the goals of environmental protection, freedom of speech and gender equality (Encyclopaedia Britannica, 2012). Post-materialist values include concerns for social equality, increased participation in important decision-making, the desire for freedom and self-expression, a sense of community and environmentalism. Thus, the focus is less on safety and security and more on *quality of life* (Brown, 2003; Daniel, 2010; Inglehart, 1977) and hence spirituality fulfilling personal experiences – even at work. Therefore, in the contemporary world of work, organisations seeking increased commitment from their employees, need to recognise that this cannot be achieved without caring for the whole person (Anderton, 2012; Bullen, 2011/2012; Van der Walt, 2007).

The shift in societal values has spurred a shift in organisational thinking. Some organisations are undergoing extensive and permanent changes in response to these societal shifts (Abdallah & Ahluwalia, 2013; Geh & Tan, 2009; Van der Walt, 2007). The state of flux in the external environment is forcing organisations to re-examine their organisational structures, policies and practices if they are to remain competitive. This has led to flatter organisational structures and a shift in responsibility away from top management and spread more evenly across the organisation. According to Bullen (2011/2012) working individuals no longer want to be considered mere cogs in the machine, but want to be recognised as individuals who could and do make a significant and unique contribution to organisational success. Work is again becoming a critical component of life. With the increase in affluence in societies and industries,

there is a growing need to find meaning in what we do, since life is not just about meeting our most basic survival needs (Geh & Tan, 2009; Hudson, 2014; Deloitte, 2014, 2015). Yet not all organisations are succeeding in meeting the demands of the new workforce.

For individuals to be capable of facing up to the challenges of the contemporary world of work, they need to establish balance in their lives and be focused, fulfilled, productive, creative, happy and motivated. Having these types of employees might ultimately provide organisations with the strongest competitive advantage to survive in the global economy (Daniel, 2010; Van der Walt & De Klerk, 2014b). Unfortunately, organisations' attempts at managing the state of flux experienced in the contemporary world of work, has led to corporate restructuring, waves of downsizing and an increase in staff turnover and temporary contract workers (Heinsohn, 2012; Kendall, 2012; Marschke et al., 2011; Parboteeah & Cullen, 2010; Pfeffer, 2010). These shifts in turn have led to stressed, insecure, dissatisfied, angry, demoralised, unfulfilled, fearful and less loyal employees (Deloitte, 2014, 2015; Marschke et al., 2011; Parboteeah & Cullen, 2010; Pfeffer, 2010). Thus, happy and motivated employees are hard to come by (Van der Walt, 2007).

As a result, there is an increased need for connectedness, meaning, purpose, nurturance and hope in work and in the workplace (Anderton, 2012; Geh & Tan, 2009; Geldenhuys et al., 2014; Tombaugh, Mayfield & Durand, 2011). People no longer want to compartmentalise their lives into separate work and life domains (Bullen, 2011/2012; Geldenhuys et al., 2014; Marschke et al., 2011; May, 2014; Sendjaya, 2015). For many, work has become the centrepiece of their lives (Geh & Tan, 2009; Geldenhuys et al., 2014; Kendall, 2012). Work is the place where most people now seek to find a sense of meaning or purpose (Hudson, 2014). The secular workplace has become the platform for finding and expressing the sacred within us (Geldenhuys et al., 2014; Kendall, 2012; Saks, 2011).

Van der Walt and De Klerk (2014b) urge that organisations should rethink their current approach to work and employees by allowing employees to bring their whole selves to work and to experience spirituality in the work environment. This does not mean that the organisation

has to become spiritual, but simply that it should provide employees with the freedom to express and explore their spirituality. However, it is assumed that if both the organisation and the individual employees working in the organisation are spiritual, there will be value congruence, which in turn could lead to higher organisational performance as well as happier and more motivated employees (Van der Walt & De Klerk, 2014b).

The research community has observed an increased interest in spirituality in the workplace (Anderton, 2012; Dandona, 2013; Ferreira Vasconcelos, 2013; Heinsohn, 2012; Kendall, 2012; Phipps, 2012; Saks, 2011; Sprung et al., 2012; Van der Walt & De Klerk, 2014a, 2014b). Spirituality on the individual level has been studied for some time. In the last two decades the focus in spirituality research has shifted to the workplace where the aim is to conceptualise and explain the phenomenon of workplace spirituality (Anderton, 2012; Giacalone & Jurkiewicz, 2010; Phipps, 2012). Given that the organisation as an entity could enact a culture that reflects a spiritual environment, it is argued that there can also be distinct experiences of spirit at work (Kinjerski & Skrypnek, 2004, 2006b, 2008).

There seems to be three distinct constructs related to the study of spirituality – individual spirituality (IS), organisational/workplace spirituality (OS) and the experience of spirit at work (SAW) either on the individual or the organisational level. Although researchers have investigated the correlations between spirituality and positive work outcomes such as job satisfaction, organisational commitment and work engagement, as far as could be established, no studies have been conducted that investigate the relationship between all three spirituality constructs and the resultant impact on certain positive work outcomes.

Concept clarification is required to measure the three spirituality constructs and determine the relationship between them. In Chapter 1 the following constructs were identified as critical constructs in this study:

- Spirit
- Spirituality
- Individual Spirituality (IS)

- Organisational Spirituality (OS)
- Spirit at Work (SAW)
- Work Engagement (WE)
- Organisational Commitment (OC)

2 SPIRIT AND SPIRITUALITY

“Four thousand volumes of metaphysics will not teach us what the soul is” (Voltaire as quoted by Dyer, 2004, p. 21).

2.1 SPIRIT

There appears to be no fixed definition of the terms ‘spirit’ and ‘spirituality’ (Geh & Tan, 2009; Hollins, 2005; King, 2007; Ledger, 2005; Marschke et al., 2011). It is difficult to define something as abstract as *spirit*, since spirit is highly subjective and transcendent (Kinjerski & Skrypnek, 2004; Klenke, 2003). However, most people recognise that there is a part of us that is not physical. Some people would call it ‘spirit’. Others might call it ‘human nature’ (Fairholm, 1996, p. 11). According to Anderson (2000, p. 16) and Marschke et al., (2011, p. 72) *“spirit comes from the Latin word ‘spiritus’ meaning ‘breath’”*. It is considered to be the vital, life-giving force within us (Anderson, 2000, p. 16) while spirituality is the outward expression of the fruits of spirit (Dehler & Welsh, 1994; Fairholm, 1996; Hawkins, 2002). Spirit affects our values, our memories and our understanding of ourselves. It encompasses our inner wisdom and authority (Fairholm, 1996). It is the sense of awareness we carry with us throughout our entire lives (Prescott, 2000).

If one uses the analogy of a light bulb; the light bulb would represent the physical body. The electricity that runs through it would constitute spirit. According to Prescott (2000) the light coming from the light bulb is equivalent to one’s spiritual self. It is the spiritual self that lights your face up when you meet a friend as this light comes from your heart. Spirit uses thoughts, feelings and actions as vehicles for expression. Spirit flows through the mind as reason, intuition

and wisdom and is expressed through emotions like love, kindness and oneness with nature (Prescott, 2000, p. 125).

2.2 SPIRITUALITY

Participants to Kinjerski and Skrypnek's (2004) study had difficulty providing a comprehensive definition of spirit, but they found it fairly easy to recall and describe a spiritual experience or identify a spiritual individual. This implies that one way to define spirituality – which seems to be difficult to verbalise formally – is to focus on the characteristics of spirituality (Ingersoll, 2003; Izak, 2012). Table 2 lists the thoughts, attitudes, emotions and behaviours that are considered to reflect spirituality – i.e. the fruits of spirit. Table 2 serves as a summary of different characteristics that define spirituality mentioned in various sources.

Table 2: Thoughts, attitudes, emotions and behaviours that reflect spirituality

Spiritual characteristic	Source citing characteristic
Authenticity	Bailin (2004); Conger (1994); Kale and Shrivastava (2003); Kinjerski and Skrypnek (2004; 2006a)
Awareness/higher consciousness/reframing consciousness	Bailin (2004); Conger (1994); Ledger (2005); Zohar and Marshall (2000)
Belief in or surrender to a higher power	Chiu (2000); Dyer (2001); Kale and Shrivastava (2003); Kinjerski and Skrypnek (2004); Mitroff and Denton (1999b); Murray and Zentner (2001); Prescott (2000); Sass (2000).
Bliss	Ashmos and Duchon (2000); Bailin (2004); Kinjerski and Skrypnek (2004; 2006a)
Centeredness	Kinjerski and Skrypnek (2004); Laurie and Tucker (1982); Smith and Katz (2006)
Compassion	Edwards (2005); Humphreys (2000); Zohar and Marshall (2004)
Connectedness (also interconnectedness, relatedness, unity, belonging)	Ashmos and Duchon (2000); Bailin (2004); Brillhart (2005); Conger (1994); Hammell, (2001); Kale and Shrivastava (2003); Kinjerski and Skrypnek (2004); Klenke (2003); Knestrick and Lohri-Posey (2005); Ledger (2005); Mitroff and Denton (1999b); Murray and Zentner (2001); Neal (2000); Neck and Milliman (1994); Piedmont (1999); Reed (1992); Sass (2000); Vaill (1991); Vokey (2000); Zohar and Marshall (2000)

Spiritual characteristic	Source citing characteristic
Essence/beingness (true self or the sense of the existential or personal state)	Ashmos and Duchon (2000); Barnett, Krel and Sendry (2000); Brillhart (2005); Conger (1994); Kale and Shrivastava (2003); McMullen (2003); Murray and Zentner (2001); Prescott (2000)
Experience of profound beauty	Bailin (2004); Smith and Katz (2006)
Faith	Bailin (2004); Carr (1996); Klenke (2003); Zohar and Marshall (2000; 2004)
Fearlessness	Cooper (2000); Edwards (2005)
Feeling fulfilled	Edwards (2005)
Forgiveness	Bailin (2004; Brillhart (2005); Carr (1996); Ledger (2005); Murray and Zentner (2001); Peirce (2005)
Generosity	Dyer (1999)
Gratitude	Bailin (2004); Cooper (2000); Kinjerski and Skrypnek (2004); Piedmont (1999); Prescott (2000)
Honesty	Covey (1994); Edwards (2005); Humphreys (2000)
Hope	Bailin (2004); Brillhart (2005); Carr (1996)
Humility	Smith (2006); Zohar and Marshall (2000; 2004)
Humour	Cooper (2000); Moore (2005); Travis and Ryan (2004)
Inspiration (also creativity and imagination)	Bailin (2004); Brillhart (2005); Cash and Gray (2000); Dyer (2006); Freshman (1999); Kinjerski and Skrypnek (2004)
Intuition	Guillory (2000); Jirsch and Cafferky (2007); McMullen (2003); Peirce (2002); Prescott (2000); Sass (2000)
Insight and sound judgement	Peirce (2002); Prescott (2000)
Joy	Kinjerski and Skrypnek (2004; 2006a)
Kindness	Dyer (1999); Manz (1998); Prescott (2000)
Love	Bailin (2004); Brillhart (2005); Carr (1996); Hawkins (2002); Kale and Shrivastava (2003); Kinjerski and Skrypnek (2004; 2006a); Murray and Zentner (2001); Neal (2000); Prescott (2000)
Need for transcendence	Bailin (2004); Kale and Shrivastava (2003); Kinjerski and Skrypnek (2004); Klenke (2003); Mitroff and Denton (1999b); Paloutzian, Emmons and Keortge (2010)
Non-violence	Nair (1997); Zohar and Marshall (2000; 2004)
Optimism	Hawkins (2002)
Peace/Stillness in heart	Brillhart (2005); Selby (2004); Tolle (2005)

Spiritual characteristic	Source citing characteristic
Principle-centeredness/Value-centeredness	Bailin (2004); Covey (1994; 1995); Hammell (2001); Kinjerski and Skrypnek (2004); Klenke (2003); Lips-Wiersma (2002a); Neal (2000); Neck and Milliman (1994); Smith (1994); Zohar and Marshall (2000; 2004)
Purpose awareness (sense of or search for meaning, purpose, fulfilment or vocation)	Ashmos and Duchon (2000); Bailin (2004); Bradshaw (1994); Brillhart (2005); Cash and Gray (2000); Cashman (1998); Frankl (2004); Kale and Shrivastava (2003); Kinjerski and Skrypnek (2004); Klenke (2003); Ledger (2005); Lips-Wiersma (2002a); Mitroff and Denton (1999b); Murray and Zentner (2001); Neck and Milliman (1994); Zohar and Marshall (2000; 2004)
Sense of awe/wonder (profound appreciation of life or sense of reverence)	Bailin (2004); Brillhart (2005); Kale and Shrivastava (2003); Ledger (2005); Murray and Zentner (2001)
Sense of harmony	Brillhart (2005); Dyer (2001); Murray and Zentner (2001)
Serenity and joy	Hawkins (2002); Kinjerski and Skrypnek (2004)
Service	Bradshaw (1994); Marcic (1997)
Simplicity	Claire (2005); Dyer (2001)
Spontaneity	Edwards (2005); Zohar and Marshall (2000; 2004)
Wholeness (integrity/integration)	Bailin (2004); Chiu (2000); Covey (1994); King and Nicol (1999); Kinjerski and Skrypnek (2004); Maddox (2000); McMullen (2003); Mitroff and Denton (1999a); Smith (2006); Zohar and Marshall (2004)
Wisdom	McMullen (2003); Prescott (2000); Zohar and Marshall (2000; 2004)

The experiences or perceptions related to spirituality as listed in Table 2 seem to revolve around themes like wisdom or a higher awareness, meaning and connectedness. Wisdom or higher awareness is characterised by a desire for self-transcendence and to experience meaning in life or relationships. There is a feeling of connectedness to others, to a higher being or something larger than oneself. There is a sense of wholeness, of harmony, wonder and awe which leads to stillness, contemplativeness and appreciation for life. The emotional states that characterise spirituality include serenity, joy, compassion, love, kindness, humour and sincerity. The basic themes that emerge include higher awareness, meaning and connectedness. For each of these basic themes, particular emotional states can also be extracted from the characteristics listed in Table 2:

- 1) **Higher awareness/Insight/Wisdom**, which reflects an understanding of life and purpose on a deeper level. It indicates the need for transcendence as well as a sense of awe/wonder

and harmony with life and others and having an intuitive understanding of life and relationships. This intuitive understanding of the essence of oneself and the universe leads to feelings of serenity and peace; hope, optimism, joy and humility.

- 2) **Meaning** – there is a deeper need for meaning and for understanding the meaning of one's own life within the larger context of the universe. There is desire for learning and growth and to be of value. It is assumed that spiritual individuals would display principle-centred behaviour that reflects their greater purpose or the things they value. For this reason, spiritual individuals will be authentic, honest, inspired, optimistic and humble.
- 3) **Connectedness** – also interconnectedness, relatedness, unity, belonging and service. There is deep compassion for others and for other living things and a desire to be of service. The general approach to life and other people is an approach of non-violence, kindness, generosity, forgiveness and love.

From these key themes, one can conclude that the general emotional state that is experienced is that of alignment with life. Alignment with life leads to peace, serenity, humility, compassion, forgiveness, generosity and love. All of these emotional states are positive and describe a state that is the opposite of anger, fear and frustration from resistance to life.

The key themes mentioned above reflect the essence of spirituality. Table 3 provides different definitions of spirituality as found in the literature from the last 30 years. The key factors emphasised by each author have been highlighted in order to identify recurring themes. The reader will note that the key themes that reflect the essence of spirituality (i.e. higher awareness, meaning and connectedness) are also repeated in the definitions listed in Table 3. Factors that refer to personal beliefs or subjective experiences of spirit are listed in green. Factors that contain some form of behavioural component or objective expression of spirituality are listed in blue.

Table 3: Definitions of spirituality

Date	Author	Definition	Key factors
1975	Tart (1975, p. 4)	<i>"The vast realm of human potential dealing with ultimate purpose, with higher entities, with God, with life, with compassion, with purpose"</i>	<ul style="list-style-type: none"> • Ultimate purpose • Connection to a higher entity • Connection to life • Compassion
1979	Vaughn (1979, p. 105)	<i>"A subjective experience of the sacred"</i>	<ul style="list-style-type: none"> • Experience of the sacred
1983	Ellison (1983, p. 338)	<i>"The capacity to find purpose and meaning beyond oneself and the immediate"</i>	<ul style="list-style-type: none"> • Meaning and purpose • Connection to a greater whole • Self-transcendence
1984	Booth (1984, p. 141)	<i>"That which enables the growth of positive and creative values in the human being ... Spirituality recalls the oneness and wholeness of Creation and demands bridges of understanding between different people and cultures"</i>	<ul style="list-style-type: none"> • Personal growth • Self-transcendence • Creativity • Personal values • Oneness • Wholeness • Connectedness to a higher being • Connectedness to others • Behavioural component
1984	Legere (1984, p. 378)	<i>"The attempt to give ultimate meaning to things. It is the ultimate context for humanity to understand itself. It is the interior quest for meaning in life which expresses itself in both contemplation and action and through which its divine presence is felt and understood"</i>	<ul style="list-style-type: none"> • Meaning • Understanding/ awareness • Connectedness • Self-transcendence • Behavioural component

Date	Author	Definition	Key factors
1984	McKnight (1984, p. 142)	<i>“an animating life force, an energy that inspires one towards certain ends or purposes that go beyond self”</i> . This implies that spirituality is seeking transcendence or connection with things beyond the self – i.e. self-transcendence	<ul style="list-style-type: none"> • Self-transcendence • Connection to a higher entity • Purpose • Behavioural component
1984	Moberg (1984, p. 351)	<i>“Man’s inner resources, especially his ultimate concern, the basic value around which all other values are focused, the central philosophy of life, whether religious, anti-religious or nonreligious – which guides a person’s conduct, the supernatural and nonmaterial dimensions of human nature ... spiritual activities and perspectives are interwoven with all other aspects of life and hence are found in a wide range of contexts, not just those related to institutional religion”</i>	<ul style="list-style-type: none"> • Inner life • Ultimate purpose and meaning • Personal values that direct behaviour • Philosophy of life • Supernatural and nonmaterial • Interconnectedness • Transcendence
1984	Shafranske and Gorsuch (1984, p. 233)	Shafranske and Gorsuch define spirituality as a quest for meaning in one’s existence. They describe it as <i>“a unique personally meaningful experience, which although positively related to specific forms of religiosity was not reliant upon any given form of appearance”</i>	<ul style="list-style-type: none"> • Existential meaning • Related to religion
1985	Hungelmann, Kenkel-Rossi, Klassen and Stollenwerk (1985, p. 151)	<i>“a present state of harmony and peace”</i>	<ul style="list-style-type: none"> • Present moment awareness • Harmony and peace
1987	Helminiak (1987, p. 35)	<i>“An intrinsic principle of authentic self-transcendence ... a strictly human reality”</i>	<ul style="list-style-type: none"> • Inner being • Self-transcendence
1988	Elkins, Hedstrom, Hughes, Leaf, and Saunders (1988, p. 10)	<i>“A way of being and experiencing that comes about through awareness of a transcendent dimension and that is characterized by certain identifiable values in regard to self, life, and whatever one considers to be the Ultimate”</i>	<ul style="list-style-type: none"> • Awareness • Self-transcendence • Ultimate purpose • Connection to life

Date	Author	Definition	Key factors
			<ul style="list-style-type: none"> • Personal values • Being
1988	Mauritzen (1988, p. 118)	<i>"The human dimension that transcends the biological, psychological and social aspects of living"</i>	<ul style="list-style-type: none"> • Transcendence
1988	Miller and Martin (1988, p. 200)	<i>"The inner experience of acknowledging a transcendent being, power or reality greater than ourselves"</i>	<ul style="list-style-type: none"> • Inner experience • Transcendence • Connection to a higher power • Larger context
1989	Benner (1989, p. 20)	<i>"Our response to a deep and mysterious human yearning for self-transcendence and surrender, a yearning to find our place"</i>	<ul style="list-style-type: none"> • Self-transcendence • Meaning • Surrender
1990	Myers (1990, p. 11)	<i>"It is a continuing search for meaning and purpose in life; an appreciation for the depth of life; the expanse of the universe, and natural forces which operate; a personal belief system"</i>	<ul style="list-style-type: none"> • Meaning and purpose • Appreciation for depth of life • Sense of connection • Personal belief system
1991	Canda (quoted by Wheat, 1991, p. 12)	<i>"The conceptual gestalt of the total process of human life development, the central dynamic of which is the person's search for a sense of meaning and purpose through relationships between self, other people, the nonhuman world, and the ground of being (as described in theistic, non-theistic or atheistic terms)"</i>	<ul style="list-style-type: none"> • Conceptual understanding • Human development/ growth • Self-transcendence • Oneness • Meaning and purpose • Connectedness with self, others and the universe • Religious/ non-religious
1991	Dale (1991, p. 5)	<i>"That human striving for the transforming power present in life; it is that attraction and movement of the human person toward the divine"</i>	<ul style="list-style-type: none"> • Transcendence

Date	Author	Definition	Key factors
			<ul style="list-style-type: none"> • Movement toward the divine
1992	Chandler and Holden (1992)	<i>"Pertaining to the innate capacity to, and tendency to seek to, transcend one's current locus of centrality, which with transcendence involves increased knowledge and love"</i>	<ul style="list-style-type: none"> • Self-transcendence • Increased knowledge • Love
1992	Doyle (1992, p. 302)	<i>"The search for existential meaning"</i>	<ul style="list-style-type: none"> • Existential meaning
1992	Emblen (1992, p. 45)	<i>"A personal life principle which animates a transcendent quality of relationship with God"</i>	<ul style="list-style-type: none"> • Transcendence • Relationship with God
1993	Block (1993, p. 48)	<i>"The process of living out a set of deeply held personal values, of honouring forces of a presence greater than ourselves. It expresses our desire to find meaning in, and to treat as an offering, what we do"</i>	<ul style="list-style-type: none"> • Personal values • Connectedness to a higher power • Larger context • Transcendence • Meaning • Behavioural component
1993	Morgan (1993, pp. 7-8)	<p><i>"the specialness of the human person ...There are different levels of spiritual activity...The first degree ... is knowledge. We all wish to know ... The second degree of spirituality is the quest for feeling good about oneself, being comfortable in the world".</i></p> <p>Morgan (1993, p. 8) adds that the spiritual nature of a person also encompasses the idea that we are part of a larger whole. We do not only seek to find meaning within this larger whole, but also have some obligation to it.</p>	<ul style="list-style-type: none"> • Knowledge • Sense of self • Sense of belonging • Connection to a larger whole • Meaning
1994	Conger (1994, p. 10)	<i>"... experienced in those moments when we literally transcend ourselves (exceed the usual limits of our self-interests), such as selfless love or social justice, or when we are able to extend our vision and feelings beyond the ordinary to discern an extraordinary, godly presence in our lives and universe"</i>	<ul style="list-style-type: none"> • Self-transcendence • Selfless love • Social justice • Behavioural component

Date	Author	Definition	Key factors
			<ul style="list-style-type: none"> • Awareness/ understanding • Connection to a higher power • Larger context
1995	Armstrong (1995, p. 3)	<i>"Spirituality reflects the presence of a relationship with a Higher Power that affects the way in which one operates in the world"</i>	<ul style="list-style-type: none"> • Relationship with a higher power
1995	Bregman and Thierman (1995, p. 149)	<i>"How the individual lives meaningfully with ultimacy in his or her response to the deepest truths of the universe"</i>	<ul style="list-style-type: none"> • Ultimate meaning • Truth
1995	Kelly (1995, p. 4)	<i>"A personal affirmation of a transcendent connectedness in the universe"</i>	<ul style="list-style-type: none"> • Personal beliefs • Transcendence • Connectedness • Larger context
1995	Laabs (1995, p. 64)	<i>"... about knowing that every person has within him or herself a level of truth and integrity, and that we all have our own divine power"</i>	<ul style="list-style-type: none"> • Truth • Integrity • Connection to a higher power
1995	Muldoon and King (1995, p. 336)	<i>"The way in which people understand their lives in view of their ultimate meaning and value"</i>	<ul style="list-style-type: none"> • Ultimate meaning and value
1997	Zinnbauer (1997)	Zinnbauer (1997) believes spirituality is reflected in a search for meaning, insight into oneself and the world and a sense of interconnectedness with all living things.	<ul style="list-style-type: none"> • Meaning • Self-reflection • Sense of interconnectedness with all living things
1997/ 1999/ 2005	Zinnbauer, Pargament, Cole, Rye, Butter, Belavich, Hipp, Scott and Kadar, (1997) Pargament (1999);	Spirituality is the tendency to be guided by thoughts, feelings and behaviours that relate to whatever is considered ultimately important. These thoughts, feelings and behaviours could be expressed either religiously or non-religiously.	<ul style="list-style-type: none"> • Ultimate purpose • Religious or non-religious • Thoughts, feelings and behaviours

Date	Author	Definition	Key factors
	Zinnbauer and Pargament (2005);		
1998	Handy (1998, p. 102)	<i>"The valuing of the nonmaterial aspects of life, and intimations of an enduring reality"</i>	<ul style="list-style-type: none"> • Value of the non-material things in life • Enduring reality
1998	Vaughan, Wittine and Walsh (1998, p. 497)	<i>"a subjective experience that exists both within and outside traditional religious systems"</i>	<ul style="list-style-type: none"> • Subjective experience • Religious or non-religious
1998	Wong (1998, p. 364)	<i>"That which involves ultimate personal truths"</i>	<ul style="list-style-type: none"> • Ultimate personal truths
1999/ 2000	Emmons (1999a, p. 5; 2000)	<p>Spirituality encompasses a <i>"search for meaning, for unity, for connectedness, for transcendence and for the highest human potential"</i></p> <p>A personal expression of ultimate concern (Emmons, 2000).</p>	<ul style="list-style-type: none"> • Meaning • Unity • Connectedness • Transcendence • Highest human potential
1999	Mitroff and Denton (1999a, p. xv; 1999b, p. 83)	<p>Mitroff and Denton found that their respondents unanimously agreed that spirituality is the search for ultimate meaning and purpose and to the desire to live an integrated life.</p> <p>The <i>"basic feeling of being connected with one's complete self, others and the entire universe"</i> (Mitroff & Denton, 1999b, p. 83). The key elements of spirituality include: unstructuredness, inclusivity, universality, timelessness, meaning, purpose in life, interconnectedness and inner peace and calm (Mitroff & Denton, 1999b, p. 89). However, if one word could best describe the meaning of spirituality, it would be <i>"interconnectedness"</i> (Mitroff & Denton, 1999a, p. xvi; 1999b, p. 83).</p>	<ul style="list-style-type: none"> • Ultimate meaning and purpose • Desire for an integrated life • Interconnectedness with others and the universe • Unstructuredness • Inclusivity • Universality • Timelessness • Inner peace and calm
1999	Thomason and Brody (1999, p. 96)	<i>"that which gives meaning to life and draws one to transcendence, to whatever is larger than or goes beyond the limits of the individual lifetime"</i>	<ul style="list-style-type: none"> • Meaning • Transcendence

Date	Author	Definition	Key factors
			<ul style="list-style-type: none"> • Connection to higher power
1999	Zinnbauer, Pargament and Scott (1999, p. 909)	<i>"A search for the sacred. Spirituality thus has to do with the efforts people exert to find and conserve the sacred in their lives"</i>	<ul style="list-style-type: none"> • Search for the sacred
2000	Allegretti (2000)	Allegretti defines spirituality as the deepest urgings and impulses of the human self, which gives meaning to everyday life. It encompasses one's desire for creativity and self-expression and expresses one's hunger for love and service. Thus spirituality at work implies bringing moral values into the workplace, standing up for what one believes in and developing awareness that life is sacred.	<ul style="list-style-type: none"> • Deepest urging of human self • Meaning • Creativity • Self-expression • Love and service • Moral values • Awareness of the sacred in life
2000	Ashmos and Duchon (2000, p. 135, 140)	<p><i>"finding and expressing meaning and purpose and living in relation to others and something bigger than oneself"</i></p> <p><i>"The recognition of an inner life that nourishes and is nourished by meaningful work that takes place in the context of a community"</i></p>	<ul style="list-style-type: none"> • Meaning and purpose • Interconnectedness with others and the universe • Inner life • Community • Connectedness
2000	Guillory (2000)	Guillory sees spirituality as referring to one's inner consciousness and the source of one's creativity and wisdom.	<ul style="list-style-type: none"> • Inner consciousness • Creativity • Wisdom
2000	Moxley (2000, p.8, 23)	<p><i>"spirit defines ourselves at the deepest levels of our being"</i> (Moxley, 2000, p. 8).</p> <p><i>"Spirit works within us... [but] also works between and among us. It connects us to everything that exists. It is because of the work of the spirit, that we experience deep communion with others, experience ourselves as part of something much larger, experience connectedness to all of life"</i> (Moxley, 2000, p. 23).</p>	<ul style="list-style-type: none"> • Interconnectedness with life • Connection to a larger whole

Date	Author	Definition	Key factors
2002	Krishnakumar and Neck (2002)	"sense of life meaning, fulfilment and a feeling of connectedness with others"	<ul style="list-style-type: none"> • Meaning and purpose • Fulfilment • Connectedness with others
2002	Pargament and Mahoney (2002, p. 649)	<i>"a process or journey by which one examines one's life, its meaning and purpose and the overall effect one has on others and the environment, including the organization one inhabits"</i>	<ul style="list-style-type: none"> • Meaning and purpose • Interconnectedness with life
2003	McClain, Rosenfeld and Breitbart (2003, p. 1603)	<i>"The way in which people understand their lives in view of their ultimate meaning and value"</i>	<ul style="list-style-type: none"> • Understanding • Personal values • Meaning • Larger context
2004	Miller (2004, p. 427)	<i>"One's core prosocial beliefs about the world, humanity, nature and one's higher being; the values by which one should ideally live"</i>	<ul style="list-style-type: none"> • Core prosocial beliefs • Awareness of a higher being • Personal values
2010	Alexander (2010, p. 291)	According to Alexander the search for spirituality reflects the need to live a meaningful life that involves commitment to a cause beyond our immediate selves. Thus, spirituality is a transformational process that occurs when one creates meaning in connection with others and dedicates oneself to a purpose greater than oneself.	<ul style="list-style-type: none"> • Meaning and ultimate purpose • Transcendence • Connection with others
2010	Dehler and Welsh (2010, p. 65, 67-68, 115)	Dehler and Welsh (2010, p. 115) differentiate between spirit and spirituality by describing <i>spirit</i> as <i>"the inner source of energy"</i> and <i>spirituality</i> as <i>"the outward expression of that life force"</i> . They posit that people act spiritually when they are engaged in something that embraces a purpose larger than them.	<ul style="list-style-type: none"> • Meaning and purpose • Connection to a larger whole • Deeper self-knowledge • Transcendence • Expression of spirit • Expression of deeper values • Behavioural component

Date	Author	Definition	Key factors
		<p>Dehler and Welsh (2010, p. 65) argue that when spirit is described as a “<i>search for meaning</i>” or “<i>deeper self-knowledge</i>” or “<i>transcendence to a higher level</i>” it assumes that there is emotion involved. In their view, spirituality is the expression of spirit – i.e. the expression of deeper beliefs and feelings/ emotions cognitively and behaviourally. From their perspective Csikszentmihalyi’s (1990) notion of a “<i>flow state</i>” is an adequate description of the expression of spirit or spirituality. Thus, “<i>spirit represents and inner source of energy, and spirituality the outward expression of that force</i>” (Dehler & Welsh, 2010, p. 65).</p> <p>“<i>Spirit’ represents a construct, an unobservable feeling or emotion analogous to motivation ... ‘spirituality’ is a concept observable as behavior</i>” (Dehler & Welsh, 2010, pp. 67-68).</p>	
2010/ 2012	Ingersoll (2010, 2012)	<p>“<i>Spirituality is a word that defies an absolute, operational definition</i>” (Ingersoll, 1994; 2007; 2010, p. 217). Thus social scientists have developed constructs related to <i>spirituality</i>, such as spiritual health or spiritual wellbeing, without pretending to be able to define the concept of spirituality (Ingersoll, 2010).</p> <p>“<i>Spirituality is a transcendent function present in all people and is the source of their awareness and being</i>” (Ingersoll, 2012)</p>	<ul style="list-style-type: none"> • Transcendence • Awareness • Being
2010	Tepper (2010, p. 145)	“ <i>the extent to which individuals are motivated to find sacred meaning and purpose in their existence</i> ”	<ul style="list-style-type: none"> • Sacred meaning and purpose
2010	Zellars, Perrewé & Brees (2010)	Zellars, Perrewé and Brees (2010) define spirituality as the <i>search for and experience of the sacred</i> .	<ul style="list-style-type: none"> • Search for the sacred

Based on the factors highlighted in Table 3, the following operational definition of spirituality was derived for purposes of this study. Spirituality, is viewed as the *expression of spirit* (Dehler & Welsh, 2010), both through observable behaviour and personal experiences. It consists of four critical components:

- 1) The search for existential *meaning or purpose in life* – this is often within the larger context of life or the universe. A search for meaning, purpose or the sacred appears 32 times in the above definitions on spirituality. The larger context, greater whole, life and/or the universe are mentioned 22 times in the definitions in Table 3 above.
- 2) *Self-transcendence and a need for personal growth*. Self-transcendence is mentioned 22 times in the definitions in Table 3 above.
- 3) *A higher awareness of life, or wisdom or increased knowledge and understanding*. Knowledge, wisdom and a higher awareness are mentioned 26 times in the definitions in Table 3 above.
- 4) *Compassion, love and the need for interconnectedness with all living things*. Interconnectedness or a connection with others and all living things as well as love and compassion are mentioned 16 times in the definitions in Table 3 above.

Since the assumption in this study is that spirituality can be reflected in both observable behaviours and personal experiences and beliefs, it has to be assumed that these four components can find individual expression in different ways.

2.3 DISTINCTION BETWEEN RELIGION AND SPIRITUALITY

The construct spirituality includes concepts like purpose and meaning, transcendence, wholeness, altruism and universality (Cash, 2000; De Klerk et al., 2006; Fry, Vitucci & Cedillo, 2005; Stanard, Sandhu & Painter, 2000) as well as having hope or faith and feeling altruistic love towards the world (Fry 2003). Some of these characteristics are also espoused by certain religions as particular values or traits inherent to their practice. However, several authors have contended that a distinction should be drawn between religion and spirituality (Arnold, 2010;

Geh & Tan, 2009; Giacalone & Jurkiewicz, 2010; Izak, 2009, 2012; King, 2010; Phipps, 2012; Saks, 2011; Sprung et al., 2012; Van Der Walt & De Klerk, 2014a).

Religion could be viewed as an abstract belief system (dogma) with ritual practices (Daaleman & Van De Creek, 2000) whereas spirituality is not bound to a particular belief system. Religion looks outwards toward rites and rituals, whilst spirituality looks inwards towards a journey of self-discovery, personal truth (Joon Hong, 2009) and an understanding of universal values (Arnold, 2010; Cash & Gray, 2000; Marques, Dhiman, & King, 2005). According to Cash and Gray (2000), spirituality is more inclusive than organised religion, since spiritual growth can be accomplished without religion. Spirituality is therefore necessary for religion, but religion is not required for spirituality (Fry, 2003; Sprung et al., 2012). Although spirituality might involve religion, for many individuals, spirituality is simply based on their own personal values and philosophy (Arnold, 2010; Milliman, Czaplewski & Ferguson, 2003).

Most theologists regard spirituality as part of religion (Van der Walt, 2007). From the work of some authors (e.g. Bell & Taylor, 2001; Geh & Tan, 2009; McClain et al., 2003) it appears that there are two perspectives on the study of spirituality and religion. From the first perspective, spirituality and religion are seen as related to each other and should thus be studied together. From the second perspective, spirituality and religion are not related and can thus be studied separately from each other.

The first perspective that views spirituality and religion as inter-related no longer applies (Milliman et al., 2003; Van der Walt, 2007). Giacalone & Jurkiewicz (2010) argue that because religion is faith-based, the rigors of proof usually required for scientific study would not apply, since one can espouse any belief without need for substantiation. For this reason, religion needs to be separated from spirituality if spirituality is to be studied scientifically. Something as ill-defined and un-testable as religion cannot contribute to the body of scientific knowledge. Additionally, viewing spirituality through a religious lens would discriminate against those individuals who do not share the same denominational orientation (Cavanaugh, 1999; Geh & Tan, 2009).

Dogmatic adherence to a particular religious orientation would detract from an individual's potential for individual spiritual growth and purpose making, especially in the workplace. Hitchens (2000) describes in his article *God at Work* how faith-based businesses often face lawsuits from employees who feel that they have been subjected to dogmatic adherence to religious principles they do not associate with personally. He warns against misinterpreting spirituality for religion and unintentionally offending employees who do not share the same faith. Particularly in the pluralistic society of the contemporary workforce where there is a strong emphasis on diversity and respect for the right to freedom of religion; this is a fair warning.

There does seem to be agreement in this new school of thought that spirituality at work does not merely mean reasonable accommodation of employees' particular religious or cultural practices and that it encompasses so much more (Hudson, 2014). "*Nondenominational prayer rooms, permission to wear religiously mandated apparel..., sensitivity about holy days, while good in themselves, are not what is meant specifically by spirituality at work*" (Hudson, 2014 p. 28). Rather the focus with spirituality is all employees – not just minorities and the concern is less with religious expression and much more about finding meaning and purpose at work and establishing connection with others at work. It is about allowing individuals to bring their whole selves to work in an authentic way.

In defining the construct *spirituality*, Tepper (2010) draws a clear distinction between *religion* and *spirituality*. Tepper (2010, p. 145) defines *spirituality* as "*the extent to which individuals are motivated to find sacred meaning or purpose in their existence*". For clarification, he elaborates on this definition. The motivation he refers to in his definition does not refer to any actions taken by individuals or any emotional end-states that ensues from these actions. Rather, motivation is whatever drives the individual to find meaning in his/her existence. For different people, this would be different things. A belief in a higher being is **not** spirituality, although the belief in God and regular church attendance might be a *consequence* of spirituality, if one's greater purpose in life is to live according to God's will. Other individuals might strive for secular purposes that need not be inherently good or bad. Saving the whales or the rhinos, conserving the

environment, curing disease or reclaiming land that had belonged to one's ancestors (Tepper, 2010) are all worthy causes to could give purpose to one's life.

What is enticing about Tepper's (2010) argument though is that these motivations or purposes should not be viewed as "good" causes since whether the purpose is good or not is a *matter of perspective*. The suicide bomber who believes that his purpose in life is to be revered by his compatriots and to receive the eternal afterlife, could be considered a highly spiritual individual, even though his actions might cause tremendous harm to many innocent individuals. Correspondingly, AIDS crusaders who march to create awareness about AIDS or who raise funds for AIDS victims might embody a "good" cause from the perspective of the secular humanist, but for a right-wing homophobe, their actions are atrocious.

Tepper (2010) believes that individual spirituality could be plotted on a continuum ranging from low spirituality to high spirituality, which means that not all spiritual individuals would be equally spiritual. Anecdotal evidence suggests that individuals question the meaning of their existence more as they grow older and get closer to death. Kushner (2001) postulates that most people are not afraid of dying; rather they are afraid of never having done anything worthwhile and thus leaving no mark (or legacy) on the world.

In Tepper's (2010) view, *sacred* does not mean *holy or divine*. Rather it refers to *anything worthy of respect or reverence*. Once again, this is interpreted subjectively, because what one individual considers sacred might be different from what another individual considers sacred – similar to the purposes or causes highlighted above. Religion thus becomes one of many possible avenues through which to find meaning and purpose. The propositions stated by Tepper (2010) pose an interesting challenge. It suggests that an individual's commitment to his/her work would largely depend on whether they consider their work as sacred or aligned with their greater purpose or not and whether they perceive the organisation's mission to be aligned with this individual greater purpose. This of course presents us with a conundrum – how does an organisation ensure that its mission is aligned with an individual's spiritual purpose or striving? Especially in larger corporations, this becomes almost impossible to manage. This

way of thinking has huge implications for our understanding of organisational culture and climate as well as human resources recruitment strategies and organisational fit.

According to Ashmos and Duchon (2000, p. 135), although spirituality is a new concept in the workplace, it has been well understood in other dimensions of human life. *“All of the great religious traditions at some level encourage the contemplative life, in which the search for meaning and purpose is primary and the goal of living in harmony with others is fundamental”* (Ashmos & Duchon, 2000, p. 135). They emphasise that spirituality at work is not about religion or conversion; rather it is about employees *“who understand themselves as spiritual beings whose souls need nourishment at work”*. Thus, understanding spirituality at work begins with understanding and respecting that individuals have an inner life and that the nourishment of this inner life can lead to more meaningful work and higher productivity (Fox, 1994). Therefore, individuals can either be nurtured or damaged by their work (Ashmos & Duchon, 2000, p. 136) depending on whether their organisations respect their inner life and provide opportunities for nourishment of their inner lives.

For a more in-depth discussion of the commonalities and differences between religion and spirituality, see Hill et al. (2000). It is necessary to move away from spirituality as a general construct and to distinguish more clearly between individual and organisational spirituality as independent constructs to be measured.

3 INDIVIDUAL SPIRITUALITY

3.1 DEFINING INDIVIDUAL SPIRITUALITY

The definition of spirituality should allow for the difference between spirituality on the personal or individual level and spirituality on the organisational level (Kolodinsky et al., 2004; Van Der Walt & De Klerk, 2014a). On the individual level spirituality includes a sense of meaning or fulfilment and feelings of connectedness with others (Krishnakumar & Neck, 2002; Milliman et al., 2003). According to Krishnakumar and Neck (2002) and Sanders, Hopkins, and Geroy

(2005), individual spirituality should be studied from an inner-origin and from an existential perspective. The inner-origin perspective of individual spirituality argues that spirituality originates from inside an individual (Krishnakumar & Neck, 2002). This view postulates that spirituality implies an inner search for meaning and fulfilment as well as a need to feel connected to others. Thus individual spirituality is a personal and private experience. The existential perspective on individual spirituality assumes that individuals question the meaning of their existence and seek to find meaning in life. Thus individual spirituality is an expression of the inner self through certain actions or behaviours. People's search for meaning could therefore be enhanced by having a meaningful job and doing meaningful work (Van Der Walt & De Klerk, 2014b).

As a result, work becomes central to discovering meaning (Geh & Tan, 2009; Geldenhuys et al., 2014; Kendall, 2012) and finding and expressing the sacred within us (Fairholm, 1996; Mitroff, 2003). As already mentioned, there is an increased need for connectedness, meaning, purpose, nurturance and hope in work and in the workplace (Anderton, 2012; Ashmos & Geh & Tan, 2009; Geldenhuys, Łaba, & Venter, 2014; Tombaugh, Mayfield & Durand, 2011; Pfeffer, 2010) which is a clear sign of the desire to express personal spirituality in the workplace. People no longer want to compartmentalise their lives into separate work and life domains (Bullen, 2011/2012; Geldenhuys et al., 2014; Marschke et al., 2011; May, 2014; Sendjaya, 2015). They want to feel they are able to express their real selves at work and integrate work and life seamlessly. Furthermore, people also do not just want to work for money; they also want to feel like they are making a positive contribution to the world (Anderton, 2012; Geldenhuys et al., 2014; Hudson, 2014) and creating a lasting legacy.

Bullen (2011/2012) believes that the demand to live a meaningful life has become a powerful driver of our economy. People are seeking meaningful work that allows for learning and development and that provides a sense of competence or mastery (Anderton, 2012; Ferreira Vasconcelos, 2013; Geldenhuys et al., 2014; Heinsohn, 2012; Kendall, 2012). It could be argued that spiritual individuals would seek spiritual growth, either through meaningful work that enables them to grow and develop or through other activities that provide them with spiritual

growth or an opportunity for self-transcendence (Alexander, 2010; Dehler & Welsh, 2010; Krishnakumar & Neck, 2002; Pargament & Mahoney, 2002). Spiritual individuals want to be useful and to be understood by others (Strack, Fottler, Wheatley & Sodomka, 2002). They would therefore actively pursue the acquisition of knowledge and understanding (Allegretti, 2000; Dehler & Welsh, 2010). Spiritual individuals experience interconnectedness to others and in most cases to all living things (Ashmos & Duchon, 2000; Geh & Tan, 2009; Pfeffer, 2010). Thus, spiritual individuals would demonstrate care and compassion towards others. They might believe that all living things are connected and may therefore express the desire to protect other living creatures or to preserve nature. They might opt to work for organisations that make a positive contribution to the community by striving to be environmentally friendly or by giving back to the poor etc.

Although for some people existential meaning could be derived from meaningful work, others might not find their work meaningful and might therefore seek meaning through other activities such as hobbies and interests or volunteering for a purpose or even in their family lives. These individuals who do not feel that their work in particular fulfils their ontological quest could still find purpose in working since working could enable them to achieve their greater purpose (Tepper, 2010). For example, if their greater purpose in life is to provide for their loved ones or travel the world or to fight for a cause, these individuals might endure negative working conditions because work enables them to care for those they love, or fund their travel or contribute financially to a cause and thus indirectly contributes to their greater purpose in life. Thus the working environment nonetheless becomes a platform for discovering meaning or for expressing one's inner being and individual purpose.

On the individual level therefore, spirituality is about personal meaning and personal creative expression, which implies that there is an inner being that requires nourishment. Individual spirituality (hereafter referred to as IS for purposes of this study), in the context of work refers to "*the desire of employees to express all aspects of their being at work and to be engaged in meaningful work*" (Kinjerski & Skrypnek, 2004, p. 28). It is about acknowledging that employees have an *inner life* that needs to be *nurtured* through *meaningful work* and *community* with co-

workers (Ashmos & Duchon, 2000, p. 137). For purposes of this study, Wheat's (1991) definition of spirituality is adopted as the definition of individual spirituality. Wheat (1991) defines spirituality as consisting of three elements: (1) a larger context in which to view the events of one's life; (2) an awareness of life and or meaning and purpose in life which translates into feeling a connection with life itself and other living things; (3) compassion for the welfare of others. It is therefore aligned with three of dimensions of spirituality mentioned above – (1) the search for existential meaning in life or larger context; (2) higher awareness of life; (3) compassion and/or interconnectedness. Furthermore, this definition does not include a religious view of spirituality and thus allows the researcher to focus on spirituality when not clouded by religious implications.

3.2 MEASURING INDIVIDUAL SPIRITUALITY

Despite spirituality's growing popularity as a topic, measuring the construct has proven to be challenging (Kapuscinski & Masters, 2010). Empirical studies that investigate the role of spirituality in human experiences have increased markedly in the last few decades (Kapuscinski & Masters, 2010; Masters, 2007; Moberg, 2002). Consequently, a number of measurement scales have been developed in psychology and the social sciences to measure the construct (see Armstrong, 1995, 1996; Bufford, Paloutzian & Ellison, 1991; Crumbaugh, 1968; Crumbaugh & Maholick, 1964; Elkins, Hedstrom, Hughes, Leaf & Saunders, 1988; Ellison, 1983; Fox, 1994; Ingersoll, 1994, 1998, 2007, 2010; Paloutzian & Ellison, 1982; Sheridan & Amato-von Hemert, 1999; Sheridan, Bullis, Adcock, Berlin & Miller, 1992; Sheridan, Wilmer & Atcheson, 1994; Wheat, 1991); all of them measuring different aspects of spirituality. In fact, there seems to be an oversupply of spirituality measurement instruments. Hill and Hood (1999), for example, compiled a volume reviewing 125 measures of religion and spirituality. The exuberant number of measurement instruments was largely due to disagreement about the definition of *spirituality* and whether religion and spirituality should be separated or combined. Each researcher defined spirituality differently and chose to focus on different characteristics or aspects of the construct. Table 4 provides a list of measurement scales that measure different dimensions of individual spirituality.

For each scale, what is measured with the scale is also indicated.

Table 4: Measurement scales that measure individual spirituality (IS)

Year	Scale	What it measures	Source
1964 1968	The Purpose in Life Scale (PILS)	An attitude scale designed to measure the degree to which an individual experiences a sense of meaning or purpose in life (Crumbaugh, 1968, p. 74)	Crumbaugh and Maholick (1964); Crumbaugh (1968)
1982 1983 1991 1999 2004 2005	Spiritual Wellbeing (SWB) Scale	This scale measures the subjective quality of a person's life. In order to do so, this scale firstly examines the religious quality of one's life, their relationship with God, i.e. their religious well-being (RWB). Secondly this scale examines a person's existential well-being (EWB), which is one's relationship to themselves, community, and surroundings. The religious well-being (RWB) combined with the existential well-being produces one's spiritual wellbeing (SWB). All questions focusing on RWB contain a mention of God. In the questions examining one's EWB, there are no religious references. Format: 20-item questionnaire	Basselt, Thrower, Barclay, Powers, Smith, Tindall, et al. (2005); Boivin, Kirby, Underwood and Silva (1999); Bufford, Paloutzian and Ellison (1991); Ellison (1983); Ellison and Smith (1991); Fee and Ingram (2004) *Also see www.lifeadvance.com
1984 1999 2003	Spiritual Well-Being Questionnaire (SWBQ)	Created in order to ascertain religiosity by looking at spiritual growth and maturity through a holistic lens. The questionnaire examines an individual's relationship with God, themselves, their community, and the environment. Moberg (the creator of the questionnaire) (Moberg, 1984) hoped that his instrument would be useful in helping to monitor progress made by religious groups and organisations, to gauge what the vital signs are for a "healthy church" to examine issues related to church decline and growth, and to understand the intensity of an individual's faith. Format: 20-item questionnaire	Moberg (1984); Boivin (1999); Gomez and Fisher (2003); Moberg (2002)

Year	Scale	What it measures	Source
1988	Spiritual Orientation Inventory (SOI)	Designed to assess the spirituality of those not affiliated with traditional religion. Format: 157-item questionnaire	Elkins, Hedstrom, Hughes, Leaf and Saunders (1988)
1991	Human Spirituality Scale (HSS)	To assess the individual attributes that constitutes an individual's spiritual values Format: 20-item questionnaire	Wheat (1991)
1992 1994		To assess views on the role of religion and spirituality in social work practice. Format: 70-item questionnaire	Sheridan, Bullis, Adcock, Berlin and Miller (1992); Sheridan, Wilmer and Atcheson (1994)
1993 1999 2001	Mysticism Scale (MS)	Developed to gauge one's experiences with the outside world or " <i>nothingness</i> ". The scale does not include any references to religious language and is divided into eight four-item groupings. These groupings measure: interpretations of mystical experience in terms of positive affect; religious holiness; noetic quality. Format: 32-item questionnaire	Burris (1999); Hood, Ghorbani, Watson, Ghramaleki, Bing, Davison, et al. (2001); Reinert and Stifler (1993)
1994 1998 2007 2010 2012	Ingersoll's Dimensions of Spiritual Wellness/ Spiritual Wellness Inventory (ISWI)	Ingersoll (1994; 1998; 2007; 2010) argues that spirituality defies an absolute, functional definition and thus one has to measure other constructs related to spirituality to infer spirituality. He developed the Spiritual Wellness Inventory to measure individual spiritual wellness. The SWI measures the following (Ingersoll, 2012): Conception of the absolute or the divine; Meaning; Connectedness; Mystery; Spiritual Freedom; Experience/Ritual; Forgiveness; Hope; Knowledge/Learning; Present-centeredness Format: 55-item questionnaire	Ingersoll (1994, 1998, 2007, 2010, 2012). *Also access www.elliottingersoll.com for a free copy of the inventory

Year	Scale	What it measures	Source
1995	Armstrong Measure of Spirituality (AMOS)		Armstrong (1995, 1996)
1996	Spirituality Scale	Measuring spirituality in African cultures Format: 20-item questionnaire	Jagers and Smith (1996)
1998	Spiritual Involvement and Beliefs Scale	Measures level of spiritual involvement such as relationship with greater power, purpose in life, fulfilment from nonmaterial things, faith, trust, identity, prayer, meditation, appreciation for the mystery of life, ability to forgive etc. Format: 26-item questionnaire	Hatch, Burg, Naberhaus and Hellmich (1998)
1999		To assess views on the role of religion and spirituality in social work practice. Format: 70-item questionnaire	Sheridan and Amato-von Hemert (1999)
1999 2001 2002 2003 2004 2005 2006 2007	Spiritual Transcendence Scale/ASPIRES (Assessment of Spirituality and Religious Sentiments)	The <i>Spiritual Transcendence Scale</i> was developed as a tool to assess how spirituality serves as a motivational force in one's life. Additionally, the scale examines " <i>universality, a belief in the unitive nature of life, prayer fulfilment a feeling of joy and contentment that results from personal encounters with a transcendent reality, and connectedness; a belief that one is part of a larger human reality that cuts across generations and groups</i> " (Piedmont 2007, p. 90). The Spiritual Transcendence Scale consisted of three subscales that focus on: prayer fulfilment, universality, and connectedness. Format: 20-item questionnaire (components of the Spiritual Transcendence Scale were analyzed using the five-factor model of personality).	Bartlett, Piedmont, Bilderback, Matsumoto and Bathon (2003); Dy-Liacco, Kennedy, Parker and Piedmont (2005); French and Piedmont (2005); Goodman, Britton, Davis-Shama and Jencius (2005); Piedmont (1999, 2001, 2004a, 2004b, 2006, 2007); Piedmont and Leach (2002); Piedmont, Hassinger, Rhorer, Sherman, Sherman and Williams (2007)

Year	Scale	What it measures	Source
2000 2003	The Expressions of Spirituality Inventory (ESI)	Cognitive-affective orientation to spirituality; Experiential/ phenomenological dimension; Existential well-being; Paranormal and Occult beliefs; Products of spirituality; Religiousness Format: Questionnaire	MacDonald (2000); MacDonald and Holland (2003)
2001	Royal Free Interview: Spiritual Scale	Measures the individuals' belief in a power beyond their own existence; <i>"relationship with a power or force in the universe that transcends the present context of reality"</i> (King, Speck and Thomas, 2001, p. 1015-6) Format: Modified interview-format scale based on informal discussion with researchers, respondents and scale users; 6 items	King, Speck and Thomas (2001)
2002	FACIT-Sp	Measures spiritual wellbeing and the role of a <i>"personal search for spiritual fulfilment"</i> for those with chronic illnesses Format: 12-item questionnaire	Peterman, Fitchett, Brady, Hernandez, and Cella (2002)
2002 2004	The Spiritual Assessment Inventory (SAI)	This tool was designed to assess two dimensions of spiritual development: Awareness of God and Quality of Relationship with God. Format: 48-item questionnaire	Fee and Ingram (2004); Hall and Edwards (2002)
2002 2004	Spiritual Transcendence Index (STI)	The index was designed to ascertain one's <i>"subjective experiences of the sacred that affects one's self perception, feelings, goals, and ability to transcend difficulties"</i> (Kim, Seidlitz, Ro, Evinger & Duberstain, 2004, p. 863). Additionally,	Kim, Seidlitz, Evinger and Duberstain (2004); Seidlitz, Abernethy,

Year	Scale	What it measures	Source
		<p>the index examines that which may be “<i>transcendent</i>”. The authors of the index explain that this measure was created, to determine how a person's normal psychological and daily experiences/ circumstances are transcended into one's notion of spirituality (Seidlitz, Abernethy, Duberstein, Evinger, Chang & Lewis 2002, p. 6).</p> <p>Format: 8-item questionnaire</p>	Duberstein, Evinger, Chang and Lewis (2002)
2003	Intrinsic Spirituality Scale (ISS)	<p>This scale adapts Allport and Ross' scale which measured intrinsic religion to ascertain how the role of spirituality functions as being one's “<i>master motive</i>”. Additionally, the scale examines the importance of spiritual growth in one's life, the role in which spirituality plays in decision making, the impact that spirituality has on personal growth, and how one's spiritual beliefs impacts aspects of their life.</p> <p>Format: 6-item questionnaire</p>	Hodge (2003)
2003	Means-Ends Spirituality Questionnaire (MESQ)	<p>The main item being measured in this questionnaire is the relationship between spiritual and religious means and ends and psychological well-being (mental health). The questionnaire examines participants' spiritual actions (prayers), spiritual feelings, spiritual relationships with others (i.e. prayer groups) and spiritual thoughts.</p> <p>Format: 63-item questionnaire</p>	Ryan and Fiorito (2003)
2003	Mindfulness Attention Awareness Scale (MAAS)	<p>The concept of mindfulness has a long lineage, dating back more than 2500 years. Writings in <i>Self Determination Theory (SDT)</i> have discussed the importance of this, and related qualities of consciousness for behavioural self-</p>	Baer, Smith, Hopkins, Krietemeyer and Toney (2006); Brown and Ryan (2003); Schenström, Rönnerberg and Bodlund (2006)

Year	Scale	What it measures	Source
		<p>regulation and well-being. Mindfulness is an open or receptive awareness of and attention to what is taking place in the present (Search Institute, 2011).</p> <p>The goal of MAAS is to “<i>distinguish between individuals who have taken on the practice of developing greater awareness and attentional capacity and members of the general adult population</i>” (Brown & Ryan, 2003, p. 833).</p> <p>Format: 15-item self-report</p>	
2002 2006 2011	Daily Spiritual Experience Scale (DSES)	<p>Measures religiousness and spirituality</p> <p>Format: 33-item questionnaire</p>	Idler, Musick, Ellison, George, Krause, Ory and Williams (2003)
2003	NIA/Fetzer Short Form	<p>Measures religiousness and spirituality</p> <p>Format: 33-item questionnaire</p>	Idler, Musick, Ellison, George, Krause, Ory and Williams (2003)
2003	Personal Meaning of Spirituality	<p>Measures personal spirituality and spiritual wellbeing</p> <p>Format: 20-items; response format not reported</p>	Graci, O'Rourke and Mahoney (2003);
2003	Spiritual Meaning Scale	<p>Measures personal spiritual meaning</p> <p>Format: 14-item questionnaire</p>	Mascaro, Rosen and Morey (2003)
2004	Inclusive Spirituality Index (ISI)	<p>Inclusive spirituality is “<i>the degree to which participants find purpose and meaning in life, interdependence with others, inner peace, and transcendence with regard to spirituality</i>” (Burke-Muse, 2004, p. 72).</p> <p>Format: 50-item questionnaire</p>	Burke-Muse (2004)

Year	Scale	What it measures	Source
2004	Miller Measure of Spirituality (MMS)	Measures core pro-social beliefs about the world, humanity, nature and one's higher being Format: 31-item questionnaire	Miller (2004)
2004 2005	Spirituality Index of Well-Being (SIWB)	The index was created in order to measure the impacts of spirituality on subjective well-being. It was originally designed to examine spirituality in health-related quality of life studies. The two overarching themes that this index examines are self-efficacy and life scheme. Format: 12-item questionnaire	Daaleman and Frey (2004); Frey, Daaleman and Peyton (2005)
2005	Spiritual Health Index (SHI)	The <i>Spiritual Health Index</i> was developed to obtain more information on what John Fisher, the author of the model, deems to be the four dimensions of "spiritual health". These dimensions are <i>personal, communal, environmental, and transcendental</i> . The personal dimension attempts to gauge one's personal satisfaction with life. The communal dimension seeks to obtain information on how one feels about one's community and interactions with those within one's community. The environmental dimension focuses on how one views the environment in which one lives. The last dimension seeks to learn more about one's views on different religious and spiritual aspects. Format: Questionnaire	Francis and Robbins (2005)
2005	Spiritual and Religious Dimensions Scale	Measures traditional Christianity vs. " <i>alternative spirituality</i> ": New Age beliefs (inclusive, open incorporation of various belief systems) and humanistic spirituality (emphasis on one's own experiences and personal authority over seeking truth)	Nasel and Haynes (2005)

Year	Scale	What it measures	Source
		Format: 43-item questionnaire	
2005	Spirituality Scale (SS)	The <i>Spirituality Scale</i> is based on a holistic concept of spirituality. It was constructed to ascertain one's self-discovery (one's search for meaning and purpose in their life), one's connectedness with others, and one's connection to the environment and cosmos (Wong & Torres, 2005). Format: 23-item questionnaire	Delaney (2005); Wong and Torres (2005)
2005	Theistic Spiritual Outcome Survey	Measuring spirituality from a theistic perspective – faith in God, feelings of reverence, love and closeness toward God, awareness of identity/purpose, love for others, worthiness/self-acceptance Format: 17-item questionnaire	Richards, Smith, Schowalter, Richard, Berrett and Hardman, (2005)
2006	Beliefs and Values Scale	Intended for use in clinical research. Items include key elements such as a search for meaning, religion, supernatural beliefs, and reactions to the world. Format: 20-item questionnaire	King, Jones, Barnes, Low, Walker, Wilkinson and Tookman (2006)
2006	Expressions of Spirituality Scale	Measures the experience of spirituality Format: 98-item questionnaire	MacDonald (2000a, 2000b)
2007	Spirituality Self-Rating Scale	Measures intrinsic spiritual orientation Format: 6-item questionnaire	Galanter, Dermatis, Bunt, Williams, Trujillo and Steinke (2007)
2008 2009 2011	Spiritual Intelligence Self-Report Inventory (SISRI-24)	Spiritual intelligence is a set of adaptive mental capacities which are based on nonmaterial and transcendent aspects of reality, specifically those which are	King (2008a, 2008b, 2008c); King and DeCicco (2009)

Year	Scale	What it measures	Source
		related to the nature of one's existence, personal meaning, transcendence, and expanded states of consciousness. Format: 42-item inventory	*Also see: http://www.dbking.net/spiritualintelligence/ for more information.
2008	Spiritual Transformation Scale	Measuring spiritual transformation: spiritual growth or decline involving four dimensions (worldview, relationships, goals, sense of self) following a diagnosis of cancer Format: 40-item questionnaire	Cole, Hopkins, Tisak, Steel and Carr (2008)
2010	Spiritual Health and Life-Orientation Measure (SHALOM)	The Life-Orientation Measure (LOM) elicits the "ideals" people have for their spiritual health in four sets of relationships with self, others, environment and/or God. The Spiritual Health Measure (SHM) asks people to reflect on "lived experience/how they feel each item reflects their personal experience most of the time"	Fisher (2010)

Source: Adapted from Kapuscinski and Masters (2010) and Search Institute (2011)¹

From Table 4, the differences in the views on what constitutes individual spirituality is quite evident since some of the measurement instruments specifically measure an individual's relationship with God or their religiosity. Some measurement instruments measure mystical dimensions or personal understanding and experiences of spirituality. Others measure wellbeing in spiritual terms. Some measurement instruments measure one or two of the dimensions of individual spirituality as highlighted in the discussion thus far, as they measure meaning or purpose in life, or self-transcendence or one's spiritual

¹ For more information on spirituality measurement instruments/scales see Hill and Hood (1999) and Kapuscinski & Masters (2010).

intelligence. Only a few measure the different dimensions that comprise spirituality as highlighted in the discussion of individual spirituality above. The most useful instruments that do not include measurements of religiosity when measuring spirituality, and that measure multiple dimensions of spirituality seem to be Wheat's (1991) Human Spirituality Scale (HSS); Ingersoll's (2012) Spiritual Wellness Inventory (ISWI); Hodge's (2003) Intrinsic Spirituality Scale (ISS); Burke-Muse's (2004) Inclusive Spirituality Index (ISI) and Francis and Robbins' (2005) Spiritual Health Index (SHI).

Wheat's (1991) HSS measures all the dimensions of spirituality as highlighted in the definition of individual spirituality for this study but specifically excludes religion or religiosity as part of the construct. This scale was also adapted to the South African context and used by Van der Walt (2007) and by Van Der Walt and De Klerk (2014a). The confirmatory factor analyses ran on the instrument in South Africa revealed a one-factor structure as opposed to the three-factor structure found in the American context. There is thus also a need to re-test this instrument for validity and reliability in the South African context. Furthermore, Kolodinsky et al. (2008) adapted Wheat's (1991) instrument to develop the Organisational Spiritual Values Scale to measure organisational spirituality. Kolodinsky et al.'s (2008) scale was used to measure organisational spirituality in this study (see section 4.2 of this chapter for a more detailed discussion of the reasons behind the selection of the Organisational Spiritual Values Scale for this study). It thus made sense to use two instruments that measure the same dimensions of spirituality but just on the two different levels required – i.e. the individual spirituality instrument for measuring spirituality for the individual and the organisational spirituality instrument for measuring how employees perceive the level of spirituality of the organisations they work for. For these reasons, the Human Spirituality Scale was selected to measure individual spirituality in this study. This scale is discussed further in Chapter 4 of the thesis.

3.3 INDIVIDUAL SPIRITUALITY AS AN IMPORTANT WORKPLACE CONSTRUCT

Several social scientists and philosophers claim that a gradual but profound change in the Western world is taking shape — a change towards a more post-material, metaphysical or

spiritual perspective on the world (Bourne, 2009; Brown, 2014; Gibson, 2009; Gray & Coates, 2013; Inglehart & Welzel, 2005; Partridge, 2005; Ray & Anderson, 2000; Tarnas, 2007). Some authors speak of a “spiritual revolution” (Bourne, 2009; Gray & Coates, 2013; Heelas & Woodhead, 2005; Houtman & Aupers, 2007; also see the Zeitgeist movement). According to Bourne (2009) the materialistic, separatist worldview dominant in society at present, is giving way to a more humanitarian and spiritual perspective on the world. This new world view has an imbedded individuality to it that emphasises the individual’s desire not only for existential meaning but for discovering their inner being and for recognising their connectedness with life, the universe and those around them (Hedlund-de Witt, 2011). This has resulted in a new ‘work ethic’ emerging where work has to be both beneficial to the self, as well as to nature, the community, or even the world (Brown, 2014; Bourne, 2009).

The central idea to this new work ethic is that by working, one is also working (in a spirituality significant sense) on oneself (Bourne, 2009; Brown, 2014; Gray & Coates, 2013). Work therefore provides the opportunity for expressing all those virtues bound up with what it is to be authentically human. Consequently, by becoming who we truly are, we can be of service to the world through the process of self-actualisation (Hedlund-de Witt, 2011). Self-actualisation in this context means re-discovering one’s intimate connections with the rest of life (Cook-Greuter, 2000). Practically, this results in individual attempts to bring ‘the soul back to the workplace’ and create a working environment in which one’s true, creative self can be fully expressed (Brown, 2014; Mitroff and Denton, 1999).

Correlations have been found between personal/individual spirituality and positive life experiences such as well-being (Visser, Garssen & Vingerhoets, 2010), life satisfaction, subjective well-being (Pagnini et al., 2011; Pashak & Laughter, 2012), happiness, self-esteem, hope, optimism (Emmons, 1999a), success (Ashar & Lane-Maher, 2004) and honesty (Wagner-Marsh & Conley, 1999). Spiritual practices like meditation enhances individual performance by increasing individual awareness and insight (O’Conner, 2009). Spirituality has also been found to be negatively correlated with depression (Hodges, 2002), loneliness (Ellison, 1983), negative moods (Fehring, Brennan & Keller, 1987) and end-of-life despair (McClain et al., 2003).

According to Van Der Walt and De Klerk (2014a) meaning and purpose in life seem to be at the core of the individual spirituality construct. Meaning in life has been researched empirically for more than 50 years and studies have consistently highlighted correlations between meaning in life and other positive life affects; emphasizing the importance of meaning in life as an essential element of spiritual wellness (De Klerk, 2005, De Klerk et al., 2006, 2009). In contrast, meaninglessness has consistently been shown to correlate with a lack of psychological well-being and the presence of psychopathologies. Research has confirmed the importance of spirituality in a person's life and that spirituality appears to be one of the usual properties of normal functioning and well-being (Van Der Walt & De Klerk, 2014a).

Jacob, Jovic, and Brinkerhoff (2009) postulate that an orientation towards inner and spiritual fulfilment rather than material fulfilment not only has implications for the way individuals will approach their lives and work but also has the potential to alleviate hyper-consumerism and its associated stress on resources and pollution. There seems to be increasing support for a green economy (Gray & Coates, 2013). Spiritual individuals thus care about the environment and want to work for spiritual organisations that drive environmentally friendly goals. On a bigger scale therefore, individuals actively engaged with consciousness development would increase their capacities to appreciate and respond to sustainability issues, resulting in more adequate, effective and creative environmental (opinion) leaders, thinkers, activists and managers. The development of human consciousness would thus lead to higher levels of functioning, creativity and efficacy (Hedlund-de Witt, 2011) across different spheres of life.

4 ORGANISATIONAL/WORKPLACE SPIRITUALITY

Some scholars have differentiated between *individual spirituality* and *organisational spirituality* based on where a researcher's focus of the study of spirituality lays. Thus, one can have an *individual-centred perspective* or an *organisation-centred perspective* (Kinjerski & Skrypnek, 2004, 2006a; Krishnakumar & Neck, 2002). Kinjerski and Skrypnek (2004) believe that this distinction is an important advancement in the study of management, spirituality and religion. Organisational spirituality appears to be a mirror of individual spirituality; where IS is the *desire*

to find meaning, to pursue opportunities for growth and development and to experience community and connection with others and OS is about *creating an environment* that is conducive to experiencing meaning, having opportunities for personal growth and development or self-actualisation and self-transcendence and where one can experience connection and community with others through a common purpose.

Organisational spirituality or workplace spirituality (as it is also known) has now become and accepted focus for academic research (Anderton, 2012; Dandona, 2013; Ferreira Vasconcelos, 2013; Heinsohn, 2012; Kendall, 2012; Phipps, 2012; Saks, 2011; Sprung et al., 2012; Van der Walt & De Klerk, 2014a, 2014b). Since the increased interest in spirituality as a workplace phenomenon, a number of studies have focused on defining and operationalising workplace spirituality (Ashmos & Duchon, 2000; Beheshtifar & Zare, 2013; Benefiel, 2003; Geh & Tan, 2009; Giacalone & Jurkiewicz, 2003c; Lund Dean, Fornaciari & McGee, 2003; Moore & Casper, 2006; Sheep, 2004; Tischler, Biberman & Altman, 2007). When it comes to the definition of workplace spirituality, the focus is on the spiritual nature of the organisation itself rather than on the spiritual nature of the individual (Kolodinsky et al., 2004, 2008, Van Der Walt & De Klerk, 2014a). An organisation can be regarded as spiritual when it strongly adheres to spiritual values such as benevolence, generativity, humanism, justice, receptivity, respect, self-transcendence, trust and mutuality (Giacalone & Jurkiewicz, 2003). This does not necessarily require the organisational members to be spiritually orientated (Van Der Walt & De Klerk, 2014a).

4.1 DEFINING ORGANISATIONAL SPIRITUALITY

The concept of workplace spirituality is also yet to be clearly defined (Kolodinsky et al., 2008). The terms spirituality at work, workplace spirituality and organisational spirituality are often used interchangeably (Giacalone & Jurkiewicz, 2003; Kinjerski & Skrypnek, 2006a, 2008). It is important to note that researchers only started talking about '*organisational spirituality*' and/or '*workplace spirituality*' in the late 1990's and early 2000's. Before this time, spirituality tended to be considered a private, personal experience only present on the individual level so there are not many definitions of OS before 2000. According to Beheshtifar and Zare (2013) as well

as Long and Mills (2010) several thematic reviews of the literature have identified a myriad of dimensions/components to workplace spirituality. Table 5 provides different definitions of workplace spirituality or organisational spirituality. The definitions in table 5 indicate that organisational spirituality or workplace spirituality involves both factors in the work environment that need to be present as well as certain emotional and cognitive states that are expressed as a result of experiencing spirituality in the workplace. Those elements that point to factors in the work environment are highlighted in green and the elements that point to emotional and cognitive states are highlighted in blue.

Table 5: Definitions of workplace spirituality/organisational spirituality

Date	Author	Definition	Key factors
2000	Ashmos and Duchon (2000, p. 137)	Workplace spirituality is the “ <i>recognition that employees have an inner life that nourishes and is nourished by meaningful work that takes place within the context of a community</i> ”	<ul style="list-style-type: none"> • Inner life • Meaningful work • Community
2000	Guillory (2000, p. xii)	“ <i>The integration of humanistic principles, practices and behaviors with sound business functioning</i> ”	<ul style="list-style-type: none"> • Humanistic principles • Sound business functioning
2003	Milliman, Czaplewski and Ferguson (2003)	Milliman, Czaplewski and Ferguson (2003) identified three dimensions to WS: (1) meaningful work; (2) sense of community; (3) value congruence – i.e. alignment with organisational values.	<ul style="list-style-type: none"> • Meaningful work • Sense of community • Value congruence
2004	Kinjerski and Skrypnek (2004, p. 27)	“ <i>Spirit at work ... describes the experience of employees who are passionate about and energized by their work, find meaning and purpose in their work, feel they can express their complete selves at work, and feel connected to those with whom they work. The term is also used to describe and organizational culture that foster autonomy, trust, cohesiveness, support, recognition, innovation and fairness through leadership and work processes</i> ”	<ul style="list-style-type: none"> • Passion and energy for work • Meaning and purpose in work • Expression of complete self at work • Connection with others • Autonomy • Trust • Cohesiveness

Date	Author	Definition	Key factors
			<ul style="list-style-type: none"> • Support • Recognition • Innovation • Fairness • Leadership
2004	Sheep (2004)	According to Sheep (2004) there are four recurring themes that characterise workplace spirituality: (1) self-workplace integration; (2) meaning in work; (3) self-transcendence; (4) personal growth and development.	<ul style="list-style-type: none"> • Self-workplace integration/Value congruence • Meaningful work • Self-transcendence • Personal growth and development
2004	Zohar and Marshall (2004, p. 27)	Zohar and Marshall's <i>Spiritual Capital</i> in 2004 redefined capital to include spirit. Spirit, they argued, encompasses meaning, values and fundamental purposes (Zohar & Marshall, 2004, p. 27).	<ul style="list-style-type: none"> • Meaning • Values • Fundamental purpose
2006	Chamiec-Case (2006)	Chamiec-Case (2006) regards spirituality in the workplace as one's efforts toward searching for and living out that which gives ultimate meaning and purpose to one's live.	<ul style="list-style-type: none"> • Purpose/Meaning • Search for meaning and growth
2006	Kinjerski and Skrypnek (2006, p. 27)	Kinjerski and Skrypnek's (2006) revised definition of spirit at work (IS) states that " <i>Spirit at work is a distinct state that is characterized by cognitive, interpersonal, spiritual and mystical dimensions. Spirit at work involves engaging work characterized by a profound feeling of wellbeing, a belief that one is engaged in meaningful work that has a higher purpose, an awareness of alignment between one's values and beliefs and one's work, and a sense of being authentic; a spiritual connection characterized by a sense of connection to something larger than self; a sense of community characterized by a feeling of connectedness to others and a common purpose; and a mystical or</i>	<ul style="list-style-type: none"> • Engaging work • Feelings of wellbeing • Meaningful work • Higher purpose • Alignment between one's values and one's work • Authenticity • Connectedness to something larger than self

Date	Author	Definition	Key factors
		<i>unitive experience characterized by a positive state of energy and vitality, a sense of perfection, transcendence, and experience of joy and bliss"</i>	<ul style="list-style-type: none"> • Sense of community • Mystical/unitive experience • Positive state of energy and vitality • Sense of perfection • Transcendence • Joy and bliss
2007	Kinjerski and Skrypnek/ Kaizen Solutions (2007)	<p><i>"At the individual level, spirit at work is a distinct, multidimensional experience characterized by cognitive, spiritual, interpersonal, and mystical dimensions. Spirit at work involves:</i></p> <p>Engaging work <i>characterized by a profound feeling of well-being, a belief that one is engaged in meaningful work that has a higher purpose, an awareness of alignment between one's values and beliefs and one's work, and a sense of being authentic;</i></p> <p>A spiritual connection <i>characterized by a sense of connection to something larger than self;</i></p> <p>A sense of community <i>characterized by a feeling of connectedness to others and common purpose; and</i></p> <p>A mystical <i>or unitive experience characterized by a positive state of energy or vitality, a sense of perfection, transcendence, and experiences of joy and bliss"</i></p>	<ul style="list-style-type: none"> • Multidimensional experience • Engaging work • Feelings of wellbeing • Work with higher purpose • Values alignment • Authenticity • Spiritual connection • Sense of community • Common purpose • Mystical/unitive experience • Positive state of energy and vitality • Transcendence • Joy and bliss
2008	Kinjerski and Skrypnek (2008, p. 319)	<i>"Spirit at work involves profound feelings of wellbeing, a belief that one's work makes a contribution, a sense of connection to others and common purpose, an awareness of a connection to something larger than self and a sense of perfection and transcendence"</i>	<ul style="list-style-type: none"> • Feelings of wellbeing • Meaningful work • Connectedness to something larger than self • Sense of community

Date	Author	Definition	Key factors
			<ul style="list-style-type: none"> • Common purpose • Perfection/ transcendence
2009	Ferguson (2009, p. 28)	<i>"Working spiritually is about fulfilling your life purpose or larger mission with passion, using your gifts in service to others"</i>	<ul style="list-style-type: none"> • Passion • Fulfilling life mission • Using talents • Service to others
2009	Shankar Pawar (2009b, p. 245)	<i>"The concept of workplace spirituality reflects employee expressions and experiences of spirituality at work, which are facilitated by various organisational aspects such as culture (Jurkiewicz & Giacalone, 2004), organizational climate (Duchon & Plowman, 2005), leadership (Fry, 2003) and organisational practices (Pfeffer, 2003)"</i>	<ul style="list-style-type: none"> • Employee expressions • Culture • Climate • Leadership • Organisational practice
2010	Giacalone and Jurkiewicz (2010, p. 13)	<i>"Aspects of the workplace, either in the individual, the group or the organization, that promote individual feelings of satisfaction through transcendence"</i> . Thus, the process of work facilitates an employee's sense of wellbeing, joy and completeness	<ul style="list-style-type: none"> • Feelings of wellbeing/ completeness/ satisfaction • Transcendence
2010	Ashforth and Pratt (2010, p. 44-45)	Ashforth and Pratt (2010, p. 44) distinguish three major dimensions to workplace spirituality. Firstly, there is self-transcendence in other words, making a connection to something greater than oneself. Secondly, there is holism and harmony. Holism and harmony assumes a certain degree of self-mastery, authenticity and balance. Thirdly, there is personal growth and development or self-actualisation. <i>"If transcendence leads to connection, and holism and harmony to coherence, then growth leads to completeness"</i>	<ul style="list-style-type: none"> • Self-transcendence • Holism and harmony • Self-mastery • Authenticity • Balance • Personal growth and development/ self-actualisation • Completeness
2010	Pfeffer (2010)	Pfeffer (2010) discuss four dimensions to workplace spirituality: (1) interesting work that allows for personal growth and development; (2) meaningful work that provides a	<ul style="list-style-type: none"> • Personal growth & development • Meaning/purpose

Date	Author	Definition	Key factors
		sense of purpose; (3) a sense of connection and positive social relationships with co-workers; (4) the ability to live an integrated life where work and life are aligned.	<ul style="list-style-type: none"> • Connection/sense of community • Integrated life
2012	Heinsohn (2012, p. 46)	<i>“Spirituality in the workplace is a dynamic process that allows individuals to align their personal values with organizational values through the intimate connection to one's life force. This way of being supports joy and passion at work, a feeling of fulfillment and belonging, and the constant flow of life connecting to one's meaning and purpose”</i>	<ul style="list-style-type: none"> • Dynamic process • Value alignment • Meaning and purpose • Joy and passion at work • Feelings of fulfilment • Belonging/community

According to the definitions listed in Table 5, the key components that comprise OS are:

- 1) *Meaningful work*, mentioned 12 times in the table above
- 2) *Personal growth and development/self-actualisation or transcendence*, mentioned 12 times
- 3) *Sense of community or connection with others*, mentioned 9 times
- 4) *Higher purpose or common purpose*, mentioned 9 times
- 5) *Value congruence*, mentioned 7 times
- 6) *Expression of inner being or complete self at work or authenticity*, mentioned 7 times

While there are several definitions of workplace spirituality (Shankar Pawar, 2009a), the central theme for most of these definitions therefore encapsulates (1) meaningful work; (2) opportunities for personal growth and development/self-actualisation or transcendence; (3) a sense of community or connection with others; (4) having a shared or common purpose; (5) experiencing value congruence and (6) an opportunity to bring one's whole self to work and be authentic at work. This central theme has also been highlighted by Ashmos and Duchon, (2000); Giacalone and Jurkiewicz, (2003c) and

Milliman et al. (2003). In considering the business case for organisational spirituality, Poole (2009) cites studies that found a correlation between the experience of meaningful work and improved organisational performance. She mentions subsequent studies which highlight that those organisations who strive for a higher purpose or common purpose, who encourage value congruence between individual employee values and organisational policies and practises and who respect the individuality of their employees have greater levels of employee commitment, motivation, performance, innovation and loyalty.

Ashmos and Duchon (2000, p.140) define workplace spirituality as “*the recognition of an inner life that nourishes and is nourished by meaningful work that takes place in the context of a community*”. According to Giacalone and Jurkiewicz (2003c), OS or workplace spirituality refers to employees perceiving their work environment as spiritual. This perception is facilitated by various organisational factors such as organisational culture, organisational climate, leadership and other organisational practices. Therefore, on the organisational level, spirit at work is about purpose and effective functioning; about “*congruence between espoused and enacted organisational values*” (Kinjerski & Skrypnek, 2004, p. 38), about opportunities for learning and personal growth and about experiencing connection with others in the organisational environment. Spiritual organisations are often described as organisations that have ‘soul’. Organisations that have soul embrace both the top line (higher purpose of the organisation) and the bottom line (financial performance) (Kinjerski & Skrypnek, 2004).

Soulful organisations have organisational cultures that reflect caring leadership and socially responsible and value-driven business practices. These organisations recognise employees’ contributions to the success of the organisation and encourage individual development and wellbeing (Ashmos & Duchon, 2000; Guillory, 2000; Kinjerski & Skrypnek, 2006a, 2008). Thus, organisational spirituality (hereafter referred to as OS for purposes of this study) is the “*integration of humanistic principles, practices and behaviors*” ... and servant leadership ... “*with sound business functioning*” (Guillory, 2000, p. xii) in order to create a work environment that is conducive for experiencing meaningful work, finding and pursuing opportunities for personal

growth and development or transcendence and experiencing a connection or sense of common purpose with co-workers and having compassion for others.

4.2 MEASURING ORGANISATIONAL SPIRITUALITY

As mentioned above, the first attempts to measure organisational spirituality (OS) were made by Ashmos and Duchon in 2000. Table 6 provides a list of measurement scales that measure different dimensions of organisational spirituality. Although the construct spirituality has been measured in psychology and sociology since the 1960's, spirituality at work and/or organisational spirituality were only incorporated into management studies in the late 1990's/early 2000's so there are no measurement scales for organisational spirituality before this time.

Table 6: Measurement scales that measure organisational spirituality (OS)

Year	Scale	What it measures	Source
2000	Ashmos and Duchon's Spirituality at work	An instrument used to observe and measure spirituality on three levels – individual, work unit and organisational. It measures spirituality in terms of inner life, meaningful work and community (Ashmos & Duchon, 2000, p. 137). Format: 66-item questionnaire	Ashmos and Duchon (2000); Gotsis and Kortezi (2008)
2003	Workplace spirituality and employee attitudes (WSEA)	This instrument measures organisational spirituality on three aspects: meaningful work, sense of community and alignment with organisational values.	Milliman, Czaplewski and Ferguson (2003)
2004	Measure of Spirituality (MMS)	The final 31-item scale has two factors that are related to prosocial beliefs and attitudes about a higher being.	Miller (2004)
2004	Workplace Spirituality Person-Organization Fit Scale,	This scale measures a combination of an individual's attitude towards their workplace as a place for spiritual growth and expression and their	Sheep (2004)

		perception of the extent to which their current workplace allows for such growth and expression.	
2008	Organizational Spiritual Values Scale (OSVS)	Wheat's Human Spirituality Scale (HSS) rephrased to assess individuals' perceptions of spiritual values exhibited by their organisations. Format: 20-item questionnaire	Kolodinsky, Giacalone and Jurkiewicz (2008)

Source: Adapted from Kapuscinski and Masters (2010) and Search Institute (2011)

Ashmos and Duchon's (2000) measurement scale measured spirituality on three levels: the individual, work unit and organisation. In their study, they were not able to clearly draw a distinction between IS and OS with the measurement instrument often measuring both elements of IS and OS. Most of the measurement scales that followed Ashmos and Duchon's scale continued to measure both IS and OS without clearly distinguishing between the two constructs. Other measurement scales that measure workplace spirituality and that are relevant for this study include Miller's (2004) Measure of Spirituality (MMS), Sheep's (2004) Workplace Spirituality Person-Organization Fit Scale and Kolodinsky, Giacalone and Jurkiewicz's Organizational Spiritual Values Scale (OSVS).

The Miller (2004) Measure of spirituality measures core pro-social beliefs about the world, humanity, nature and one's higher being. It is in effect a measure of an individual's personal spirituality. Once again the implication is that value alignment/congruence between organisations and their individual employees is imperative for a spiritual workplace. However, this measurement instrument does not measure the organisational environment or culture, but rather IS and is therefore not suitable for measuring OS in this study.

Another measurement scale that measures both IS and OS is Sheep's (2004) Workplace Spirituality Person-Organisation Fit Scale. Sheep (2004) suggests that there are four recurring themes in the context of workplace spirituality: (1) self-workplace integration; (2) meaning in work; (3) self-transcendence; (4) personal growth and development (also see Kinjerski & Skrypnek, 2006a). His scale therefore measures a combination of the individual's attitude

towards their workplace as a place for spiritual growth and expression and their perception of the extent to which their current workplace allows for such growth and expression. Both Ashmos and Duchon (2000) and Sheep's (2004) measurement scales assess aspects of personal spiritual experiences at work (IS) and the factors that characterise a spiritual workplace (OS) and therefore are more useful instruments for measuring OS. However, because they measure both elements of IS and OS, they are not suitable measurement instruments for this study since this study draws a clear distinction between IS and OS and aims to measure the two constructs separately.

4.3 ORGANISATIONAL SPIRITUALITY AS AN IMPORTANT WORKPLACE CONSTRUCT

Poole (2009) questions the outcomes of organisational spirituality. She sets out the chronological development of theory around organisational spirituality over time. Some of the key studies she highlights as well as her critical observations are worthy of consideration in understanding what organisational spirituality entails and will therefore be discussed next.

We can see the first traces of what would become a study of OS as far back as 1976 when Hackman and Oldham proposed a model depicting the conditions required for individuals to experience increased motivation and job performance. Hackman and Oldham (1976) identified positive causal links between core job dimensions such as skill variety, task identity, task significance, autonomy and feedback and specific psychological states – for example, participants found their work more meaningful, felt more personally responsible for their work outcomes and had better knowledge of their work results. They demonstrated high internal motivation and were delivering high quality work. Job satisfaction was high and absenteeism was low. Of particular relevance here is the causal importance of the experience of meaningful work on work outcomes. The experience of meaningful work was defined as “*the degree to which the individual experiences their job as one which is generally meaningful, valuable and worthwhile*” (Hackman & Oldham, 1976, p. 256).

Peters and Waterman (1982) published *In Search of Excellence* where they set out to find excellent companies and identify the factors that distinguish them from average performing companies. The excellent companies that formed part of their study had superordinate goals that motivated employees to believe in the company. According to Poole (2009), this study illustrates how the spiritual concept of contributing to a greater purpose can be utilised in employee motivation and organisational performance. Peters and Waterman's (1982) findings would later be echoed in Collins and Porras' work in *Built to Last* (1994) and *Good to Great* (2001). None of these studies refer to organisational spirituality per se, but rather explain how a greater common purpose or superordinate goals motivate and inspire employees and provide meaning to the work they are doing. Working towards something that is larger than oneself, i.e. a greater purpose, is one of the components of spirituality and more particularly of organisational spirituality.

Jaques (1989) conceptualised a total system for effective managerial organisation and leadership and postulated that people want to work to their full capacity. However, the extent to which they choose to do so would depend on whether they experience value congruence between their own personal values and the values implied in the role they have to fulfil. Jaques (1996) therefore believed that organisations had a responsibility to fit people to jobs that fit both their capabilities and their values. The elements of spirituality that are highlighted here include aligned values and purpose as well as a desire for personal growth and development.

The early studies leading up to research on OS focused on the conditions that create an organisational environment that is conducive for employees to experience meaning in the work they do and feel motivated to work towards a common purpose or towards something larger than themselves. The emphasis was thus on the core job components or dimensions that contribute to personal meaning in work.

Compassion or care as elements of workplace spirituality was first introduced in the 1990's. The first book that focused on these elements was Lloyd's (1990) book *The Nice Company* where he described the companies that would succeed in the future as companies that are

“imaginative, caring, sensitive and loving” (Lloyd, 1990, p. 225). So for the first time, personal attributes were being ascribed to organisational entities. Lloyd found that companies that were rated as the best companies to work for (and by implication were therefore ‘nice’) had earnings per share that were 41% higher than companies with less ‘nice’ environments. He also found that companies that refrained from hostile takeovers outperformed the hostile ones by 86% (Lloyd, 1990). These findings were meant to illustrate that espousing to be nice and being experienced as a nice place to work for, could enhance a company’s bottom line.

Renesch’s (1992) collection of articles from various authors introduced concepts like ‘intuitive leadership’, ‘soul’ and ‘metanoic purpose’ into organisational literature. Harman (in Renesch, 1992) argues that the most critical factor for gaining a competitive advantage in the 21st century, is how to discern purpose and meaning in the workplace. Channon (in Renesch, 1992) notes that people who feel that they are working towards a greater purpose or something larger than themselves will feel more motivated. It is also postulated that these people would be more dependable and loyal as a result. Brown (in Renesch, 1992) argues that a sense of community leads to greater employee satisfaction.

Neck and Milliman (1994) argued for the business case for OS by linking spirituality to Maslow’s concept of self-actualisation. They postulated that people have a desire for personal growth and development, and a work environment that is conducive to that, would enhance organisational performance, innovation and employee commitment. This argument was echoed by Reichheld’s (1996) finding that loyalty, rather than market share, is the key driver in company performance. He found that employees that were more loyal to their organisations performed better because they were proud of the work they did and because there was a balance between their personal interests and the organisation’s dedication to serving others. Therefore, creating an environment where employees have an opportunity for personal growth and where they can contribute to a greater purpose would lead to increased loyalty from employees and consequently to better organisational performance. Reichheld’s (1996) findings were substantiated by two further studies; one by Heskett, Sasser and Schlesinger’s (1997) and one by Rucci, Kirn, and Quinn (1998). These studies demonstrated the mutually reinforcing link

between organisational profit and growth on the one hand and employee loyalty and job satisfaction on the other.

Buckingham and Coffman (1991) released a write-up of two large Gallup studies undertaken over a 25-year period, involving 1 million employees and 80 000 managers across various companies and industries around the world. The study was initiated to identify top performing employees and ask them what they require from their organisations. The answer was that they require great managers. So the researchers set out to find out how great managers recruit, motivate and keep talented employees. From their research findings they were able to formulate twelve questions that measure the strength of a workplace and the core elements required to attract and retain top performing talent. The twelve questions that measure the strength of a workplace include the following dimensions of OS: meaning and purpose, opportunities for growth and learning and a sense of community.

Mitroff and Denton's (1999) ground-breaking study *A Spiritual Audit of Corporate America*, was the first actual reference to the concept of *spirituality in the workplace*. Their conclusion was that spirituality in the workplace manifests through meaning-making and the top three sources of meaning in the workplace are: (1) interesting work; (2) realising one's full potential or self-actualisation and (3) being associated with a good and ethical organisation – assumingly this adds to the sense of community. When asked how important spirituality was in their lives, respondents provided an average response of 5.7 on a 7-point Likert scale. However, when asked how much of their spiritual selves they thought they could bring to work, the average response dropped to 3.4 on a 7-point Likert scale; indicating that people did not feel like they were allowed to express their spiritual selves at work.

In the same year, Milliman, Ferguson, Trickett and Condemi (1999) published their case study on Southwest Airlines as a spiritual workplace. They identified a sense of purpose; community; empowerment; work ethic and rich emotional expressions as the factors that contribute to a spiritual workplace. Three years later, Lips-Wiersma (2002b) investigated spiritual meaning-making as it related to career development and found that there were four career purposes

evident in people who held spiritual views: (1) developing and becoming the self; (2) unity with others; (3) expressing the self and/or (4) serving others. This is a critical finding as it provides some indication of the kind of work environment that would be conducive for experiencing spirit at work and for people with high IS to express their spirituality at work. Highly spiritual individuals would seek opportunities to learn and grow; they want to work in an environment where they can express themselves, experience community with others and serve others.

Howard and Welbourne (2004) found a correlation between introducing spiritual values into the workplace and a reduction in absenteeism as well as an increase in productivity. Other potential benefits of organisational spirituality include an experience of interconnectedness and trust among team members, collective creativity and motivation as well as reciprocity and solidarity in a team which can lead to enhanced organisational performance (Marques, 2005). Additional research studies over the past two decades have found correlations between organisational spirituality and organisational effectiveness (Karakas, 2010), leadership (Nooralizad, Ghorchian & Jaafari, 2011; Phipps, 2012) and work values (Issa & Pick, 2011).

Four studies represent the development of measurement instruments for workplace spirituality and the operationalisation of the workplace spirituality construct (Rego & Cunha, 2008). The first study is Ashmos and Dunchon's (2000) development and validation of a measurement instrument for workplace spirituality on three levels: individual, work team and organisational. The second study is Milliman et al.'s, (2003) verification of three of the workplace spirituality dimensions identified by Ashmos and Dunchon (2000): meaningful work, sense of community and value alignment to explain five work attitudes: affective organisational commitment, intentions to leave, intrinsic work satisfaction, job involvement and organisational-based self-esteem. Milliman et al. (2003) found that meaningful work, as a dimension of workplace spirituality, explains affective organisational commitment, intrinsic job satisfaction, job involvement and self-esteem. Sense of community was found to be linked to all the attitudes. This illustrates the significance of a sense of community for establishing workplace spirituality. Thus, one could assume that organisational culture could have an impact on whether people experience their organisations as spiritual organisations or not. Lastly, they found that value

alignment explains organisational commitment and intention to quit. This finding further strengthens the argument that spiritual organisations would attract and retain spiritual individuals who feel their values are aligned with those of the organisation.

The third study is Duchon and Plowman's (2005) investigation in medical units, where they found that work-unit performance is correlated with work unit spirituality. Lastly, Rego and Cunha's (2008) study built on Ashmos and Dunchon (2000) and Milliman et al.'s, (2003) studies. Their results suggested that people display higher emotional and normative commitment and lower continuance commitment when they experience a sense of community in their work teams, feel that their values are aligned with those of the organisation, consider the work that they do as meaningful, experience enjoyment of work and perceive their organisations as places that provide them with opportunities to express their inner lives.

4.4 IS ORGANISATIONAL SPIRITUALITY A TYPE OF CULTURE OR AN EXPERIENCE?

Giacalone and Jurkiewicz (2003c), postulate that workplace spirituality refers to the *experience* of spirituality at work. This experience can be facilitated by various organisational factors such as organisational culture, organisational climate, leadership and other organisational practices. Shankar Pawar (2009b, p. 245) also states that workplace spirituality reflects both "employee expressions and employee *experiences* of spirituality at work". The definitions of OS listed in Table 5, place a heavy emphasis on particular emotional states or experiences. It therefore seems that OS has two dimensions – on the one hand there is the type of organisational environment (i.e. culture and climate) that leads to OS and on the other hand there are the emotional states or the experiences that depict OS. The question is, is OS a culture or is it an experience?

Daniel (2010) postulates that organisational spirituality would imply a particular type of culture within the organisation. Organisational culture has been most commonly defined as "*a complex set of values, beliefs, assumptions and symbols that define the way in which the firm conducts its business*" (Barney, 1986, p. 657). The elements that comprise culture therefore include

values, beliefs and assumptions. By implication then, a spiritual culture would have to have a particular set of values, beliefs and assumptions that relate to the recognition of one's inner being, meaning and perhaps meaningful work as well as community and support. Brown (2003) clarifies this best by stating that organisational spirituality allows for a *culture* that nurtures and respects employees, assists in designing work that would be challenging and invigorating and helps with team and community building within the organisation. A spiritual organisation thus creates an *environment* that is conducive in enabling and fostering the capacities of individual employees (Daniel, 2010). The emphasis is thus on the collective culture of the work environment and not on the experiences of individuals at work.

Despite the heavy emphasis placed on particular emotional states or experiences as part of what constitutes workplace spirituality, the only measurement instrument that measures experiences of spirit, is Kinjerski and Skrypnek's (2006) Spirit at Work Scale. This instrument measures the experience of spirit at work in terms of four criteria: engaging work, sense of community, spiritual connection and mystical experience. The Spirit at Work Scale emphasises individual personal experiences and measures the experience of spirit at work, rather than the culture of the workplace. By implication then, spirit at work which refers to spiritual experiences in the workplace, seems to be a separate construct from OS. As explained by Daniel (2010), OS is about the collective culture or climate in the organisation and not the individual experiences of spirit at work.

5 EXPERIENCE OF SPIRIT AT WORK

5.1 DEFINING SPIRIT AT WORK

From the various definitions on OS and the work that Kinjerski and Skrypnek (2006, 2008) have done, it seems that there is a distinct difference between the organisational environment that makes the workplace more meaningful (i.e. OS) and the actual *experience* of spirituality whilst at work or working (i.e. SAW). This is similar to the distinction between meaningful work and meaning in work. De Klerk et al. (2006) explain that 'meaningful work' refers to working

conditions both in the organisation as well as in the nature of the work being done that are conducive to motivation. It includes constructs such as autonomy, responsibility, task significance, work identity and complexity as well as how challenging the work is and the variety of tasks the individual has to complete in their work. This should be distinguished from 'meaning in work' which, from the researcher's perspective, refers to the experience of timelessness and flow while engaged in work that the individual finds personally meaningful. This implies that one type of work might be meaningful to a particular individual but not to others who do not value the type of work as much.

Where OS refers to the spiritual nature or culture of the organisation, spirit at work refers to experiences at work that are spiritual in nature. These experiences can happen to both individuals in the workplace or work teams in the workplace. Thus, OS relates to characteristics of spiritual organisations whereas SAW relates to subjective experiences that are characterised by certain cognitive and emotional states. These experiences often happen on the team or group level. According to Kinjerski and Skrypnek (2004, p. 27) spirit at work describes "*the experience of employees who are passionate about their work, feel they can express their complete selves at work, and feel connected to those with whom they work*". Kinjerski and Skrypnek (2004) found that when individuals were engaged in work they found meaningful, they experienced "*a natural high*", or total bliss, joy and wellbeing. This is similar to the state of *flow* described by Csikszentmihalyi (1988, 2008).

Individuals who found their work meaningful reported enjoying their work (Kinjerski & Skrypnek, 2004, 2006b). Additionally, they reported feeling love for the members of their work teams. These people felt they could be authentic at work, since they perceived congruence between their own values and beliefs and the values of the organisations they work for. They also believed that their work really mattered and that they were making a difference by what they were doing. They experienced a strong sense of connection to others and awareness to something larger than themselves. For many of these participants, their spiritual experiences at work also had a mystical dimension that they often described as "*perfection, or living in the moment, or effortless energy*" (Kinjerski & Skrypnek, 2004, p. 27). During these times, they had

no sense of time and space. They simply enjoyed the moment (Kinjerski & Skrypnek, 2006a, p. 25). The combination of these experiences is suggestive of an altered state of consciousness similar to that of *flow* (Csikszentmihalyi, 1988, 2008).

Spirit at work (hereinafter called SAW for purposes of this study) could therefore be defined as a distinct experience characterised by four dimensions: (1) engaging work; (2) mystical experience; (3) spiritual connection and (4) sense of community. The first dimension of SAW, engaging work, is characterised by profound feelings of well-being, a belief that one is engaged in meaningful work that has a higher purpose, and an awareness of alignment between one's personal values and beliefs and the values expressed by one's work. The second dimension, a mystical or unitive experience, is described as a positive state expressed through feelings of vitality, energy, bliss, joy and flow. Thirdly, spiritual connection, is characterised by a sense of connection to something larger than the self. Lastly, a sense of community, describes a feeling of connectedness to others and having a common purpose with one's co-workers (Kinjerski & Skrypnek, 2004, 2006b) and is thus reflective of spirituality on the team or group level.

5.2 HOW THE EXPERIENCE OF SPIRIT AT WORK MANIFESTS

The experience of spirit at work becomes a third factor to consider in the study of spirituality. Spirit at work (SAW) should be separated from the constructs IS and OS, since SAW refers to the *interplay between IS and OS*. Kinjerski and Skrypnek (2008) conducted a grounded theory study where they conducted in-depth interviews with thirteen participants who were well-known for having had positive work experiences or having identified themselves as having had spiritual experiences at work. They explored how these individuals came to have spiritual experiences at work by asking them to describe their work, what drew them to their work, how often they had spiritual experiences at work and how these spiritual experiences felt to them. Their research revealed that there are four paths to experiencing SAW: (1) the always there path, (2) the coming together path, (3) the transformative event path and (4) the contextually sensitive path. Figure 4 illustrates the four paths identified by Kinjerski and Skrypnek (2006b; 2008) in their grounded theory study and the model they developed consequently to illustrate these

paths. These four paths will be discussed briefly to highlight the relevance of different paths to spirit at work and how they contribute to the theoretical framework of this study.

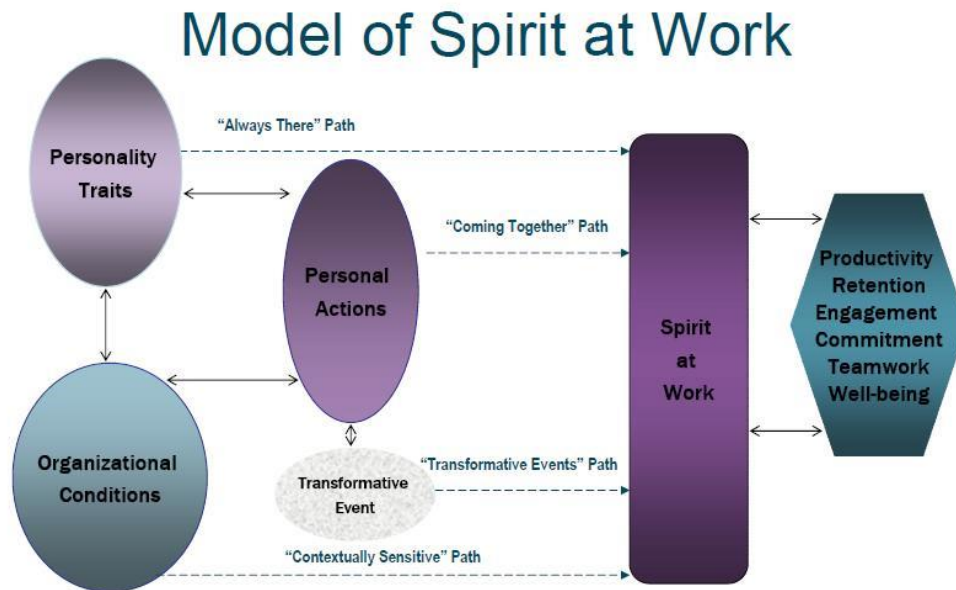


Figure 4: Different paths to spirit at work

Source: Kaizen Solutions (2007)

As illustrated in Figure 4, the *always there* path assumes that certain individuals are predisposed to spiritual experiences due to particular personality traits present in them and therefore follow a direct path to experiencing spirit at work. Persons on the “*always there*” path seem to experience spirit at work in spite of the contexts they find themselves in or the kind of work they perform. They might be performing work that appears meaningless to an outsider or they might work under negative working conditions, yet they experience joy and bliss in their work (Kinjerski & Skrypnek, 2006b, p. 236).

These individuals seem to display *spiritual intelligence* (Emmons, 1999b, 2000) and they will actively seek growth and development (Kinjerski & Skrypnek, 2008, p. 323) or opportunities for self-transcendence. One is left wondering if these individuals always maintain high levels of motivation despite possibly working in negative organisational contexts. If a particular

organisational context does become too toxic, what would be the key factors that would result in an individual in this category opting to leave a particular organisation? Alternatively, would a highly spiritual individual working in a highly spiritual organisation deliver better results than a highly spiritual individual working in a non-spiritual organisation?

The coming together path assumes that spirit at work develops over time and is a result of abilities, experience and passion coming together. For individuals on this path, spirituality happens once the individual decides to pursue their heart's calling. For most individuals this happens in mid-life once they become more reflective and once they start considering the legacy that they will be leaving behind (Kinjerski & Skrypnek, 2008, pp. 323-324). A personal responsibility to foster spirit at work seems to be fundamental to individuals on this path (Kinjerski & Skrypnek, 2006b, p. 236).

According to Robinson and Aronica (2009) the Element is the point where our abilities or talents (the things we are good at) come together with our passion (the things we love to do). One could thus postulate that individuals on this path, would have to discover their element and consequently feel driven to pursue their spiritual purpose first before they would experience spirit at work. To increase retention of these individuals, the organisation could play a role in creating the conditions conducive for the individual to discover his/her element, by providing training, coaching, mentoring, support or leadership etc. This in turn would enable the individual to find his/her element and experience spirit at work. It thus becomes critical for the environment to espouse spiritual values and create a workplace where spiritual experiences are possible. This path implies that there are certain mediating or moderating variables that affect whether spirit is experienced at work or not.

A *transformative event* requires that a personal transformation takes place in response to a personal crisis or a spiritual awakening (Kinjerski & Skrypnek, 2006b, 2008). The transformative event might take place inside or outside of work. Again, the experience of spirit at work is dependent on certain moderating or mediating variables that transform the person's perception and allows him/her to experience spirit. This path implies that it is possible for the organisation

to create conditions that are conducive to the individual experiencing a transformative event at work that enables him/her to discover spirit at work.

Lastly, the *contextually sensitive path* is distinct from the other three paths as individuals on this path experience spirit at work particularly due to the work environments they find themselves in (Kinjerski & Skrypnek, 2008, p. 325). This last path to spirit at work seems to imply that one's work environment or working conditions could either enable one to experience spirituality at work or could detract from one's spirituality. The work environment itself becomes the moderating or mediating variable. An environment that allows an individual to feel "*included, challenged, supported, respected, trusted, valued and recognised*" (Kinjerski & Skrypnek, 2008, p. 325) would be conducive to experiencing spirituality at work where an environment that does not respect and support the individual or allow them to feel valued and recognised, would detract from their ability to experience spirit at work. This last path thus assumes that the organisation has to be spiritual for individuals to experience spirit at work.

Kinjerski and Skrypnek's (2008) model on different paths to spirituality further suggests that experiences of spirit at work – irrespective of the path pursued to these experiences – lead to certain positive work outcomes – i.e. productivity, retention, engagement, team work and wellbeing. The implication is therefore that higher SAW provides direct benefits to the organisation. The impact of spirituality on positive work outcomes is discussed in more detail later in this chapter.

The shortcomings of Kinjerski and Skrypnek's (2008) study is that the sample that was used in this study was very small – i.e. only thirteen participants. Although they gave rich descriptions of their experiences, one is still hesitant to assume that the four paths identified could be generalised to the broader public and that one could assume there are no other paths to spirit at work. The always there path seems to imply existing personal spirituality and the assumption in Kinjerski and Skrypnek's (2008) model is that when there is existing personal or individual spirituality, individuals automatically experience spirit at work. The other paths imply that external factors – whether it be life-changing events or a particular organisational environment

– contribute to the experience of spirit at work. The model assumes causality, but this has not been empirically established with a larger population.

There is merit in establishing whether SAW is in actual fact distinctly separate from IS and OS as this would provide clarity on how to define and measure spirituality constructs. The postulation that a pre-existing level of personal spirituality automatically leads to the experience of spirit at work, poses the question as to what the nature of the relationship between the spirituality variables IS, OS and SAW is. The Kinjerski and Skrypnek (2008) model proposes fourth paths to spirituality and suggest that certain external factors could contribute to the experience of spirit at work. However, these paths have not been validated empirically. Therefore, conducting a quantitative study that measures the three spirituality constructs identified here separately and then empirically testing the nature of the relationship between the three constructs, could either confirm the four paths proposed in Kinjerski and Skrypnek's (2008) model or highlight gaps or weaknesses in the model that require further investigation. Furthermore, empirically testing which of the variables – IS, OS or SAW – have the greatest impact on positive work outcomes could help clarify whether the relationship between the constructs are important or whether only one of the constructs significantly impacts on positive work outcomes. If the inter-connectedness of the three spirituality constructs leads to positive work outcomes, efforts should be aimed at encouraging all three dimensions of spirituality. If only one of the constructs has a significant impact on positive work outcomes, it will be important to validate the importance of this particular dimension of spirituality through follow-up empirical studies.

5.3 MEASURING SPIRIT AT WORK

Table 7 list a few measurement instruments that specifically measure the experience of spirit at work (SAW) on the team or group level.

Table 7: Measurement scales that measure spirit at work (SAW)

Year	Scale	What it measures	Source
1991 1998 2000 2005	The Spiritual Experience Index (SEI)	The <i>Spiritual Experience Index</i> was created in order to ascertain a variety of the developmental aspects of faith. The hypothesis is that mature faith corresponds to a high score on the index which means that one has high self-esteem, lower intolerance of ambiguity, and lower dogmatism (Genia 1991, p. 339). Format: Questionnaire	Genia (1991); Genia and Cooke (1998); Reinert and Bloomingdale (2000); Watson and Morris (2005)
2002 2006 2011	Daily Spiritual Experience Scale (DSES)	The <i>Daily Spiritual Experience Scale</i> was developed to measure one's understanding of the divine and one's relationship (interaction or involvement) with the divine. The goal of this scale was to measure experiences as opposed to beliefs or behaviours. Format: 16-item questionnaire	Underwood and Teresi (2002); Underwood (2006, 2011) *Also see http://www.dsescscale.org/ for more information.
2006	Spirit at Work Scale (SAW)	This scale is meant to assess the experience of spirituality at work in terms of four criteria: engaging work, sense of community, spiritual connection and mystical experience (Kinjerski & Skrypnek, 2006) Format: 18-item questionnaire	Kinjerski and Skrypnek (2006)

Source: Adapted from Kapuscinski and Masters (2010) and Search Institute (2011)

The reader will notice that apart from Kinjerski and Skrypnek's (2006) Spirit at Work Scale (SAW), there are not that many instruments that measure the experience of spirit at work. In fact, there seems to be only two other useful scales that focus on the experience of spirit, as most other instruments are intended to measure either individual spirituality or organisational spirituality. This calls into question the different levels at which spirituality can be studied and highlights the need to investigate the relationship between these three spirituality constructs to determine whether more instruments that measure SAW should be developed or whether these instruments should rather be combined with existing instruments that measure OS.

Since Kinjerski and Skrypnek's (2008) model for spirit at work, lay the foundation for understanding SAW in this study, it makes logical sense to select their Spirit at Work Scale to measure SAW in this study.

6 SPIRITUALITY AND POSITIVE WORK OUTCOMES

A number of studies have investigated the impact of workplace spirituality on other work outcomes such as work attitudes (e.g., Milliman et al., 2003), organisational productivity (Fry et al., 2005), and work unit performance (Duchon & Plowman, 2005). Lund Dean et al. (2003) have argued for the grounding of studies on workplace spirituality in organisational science to illustrate its value in the workplace. Giacalone and Jurkiewicz (2003, p. 21) concur with this, highlighting the importance of integrating spirituality specifically with organisational behaviour (OB). They postulate that the study of spirituality and how it relates to OB should be focused on the pivotal question: *"Is spirituality significantly related to various aspects of organizational behavior and performance and if so, how?"*

Empirical studies on the outcomes of workplace spirituality, are still considered quite rare (Kendall, 2012; Lips-Wiersma & Morris, 2009; Roof, 2015; Shankar Pawar, 2014; Van Tonder & Ramdass, 2009). Some scholars have argued that claims made about the positive impact of spirituality in the workplace are supported only by anecdotal evidence or inductive logic (Chalofsky, 2003a; Duchon & Plowman, 2005; Giacalone & Jurkiewicz, 2003b; Kendall, 2012; Michaelson, 2005). Although the study of workplace spirituality therefore still appears to be in the formative stages of its development (Bell-Ellis et al., 2015; Roof, 2015), some groundbreaking studies have confirmed significant correlations between spirituality and positive work outcomes (Kendall, 2012; Van Der Walt & De Klerk, 2014b).

The value of spirituality as a potential driver of positive work outcomes, was postulated in Kinjerski and Skrypnek's (2008) model on spirit at work. The model implied that the experience of spirit at work would have positive benefits such as productivity, retention, engagement, team

work and wellbeing. Therefore, for the current study to have value outside of the contribution to the theory development on workplace spirituality, it is useful to also measure the impact or effect of these different spiritual variables on particular work outcomes. Empirically testing which of the variables – IS, OS or SAW – have the greatest impact on positive work outcomes could help clarify whether the relationships between the constructs are important or whether only one of the constructs significantly impacts on positive work outcomes.

The researcher selected two positive work outcomes to investigate – work engagement (WE) and organisational commitment (OC). Work engagement was selected because of its impact on work performance and its natural link to things like meaningful work and being involved and absorbed in work. The researcher assumed that because of the similarity in components between spirituality and engagement, spirituality should impact on engagement. Work engagement was also one of the key positive work outcomes illustrated in Kinjerski and Skrypnek's (2008) model. Both workplace spirituality and work engagement are emerging as critical topics that require further investigation in the field of organisational behaviour (Ahmad & Omar, 2015; Roof, 2015; Saks, 2011). Furthermore, empirical research linking these two constructs are still limited in number (Ahmad & Omar, 2015; Roof, 2015). Thus, there is justification for investigating the correlation between spirituality and work engagement empirically.

Organisational commitment was selected as a positive work outcome because, although it has been studied extensively in first world countries (Bell-Ellis et al., 2015; Yalabik, Van Rossenberg, Kinnie & Swart, 2015), it has not received the same level of attention in third world countries like South Africa. Furthermore, Geldenhuys et al. (2014) observe that lately there has been more research interest in the correlations between meaning and/or meaningful work (which is an element of workplace spirituality), work engagement and organisational commitment. However, the relationship between workplace spirituality and organisational commitment has not yet received the research attention it deserves, especially within the context of a developing economy like South Africa. The researcher therefore selected this work

outcome to test whether the current study would also find positive correlations between spirituality and organisational commitment in the South African context.

The current study adds to the business case for spirituality by also highlighting which dimension of spirituality – i.e. IS, OS or SAW – contribute most to work engagement and organisational commitment. This has huge implications for the incorporation of spirituality into business practices in future. Both work engagement and organisational commitment present potential long-term benefits to organisations who implement spiritual practices to drive these outcomes (Geldenhuys et al., 2014). It is therefore necessary to describe work engagement and organisational commitment in more detail.

7 WORK ENGAGEMENT

7.1 DEFINING WORK ENGAGEMENT

In the last two decades, research has paid increased attention to the domain of positive psychology which is the scientific study of human strengths and ways to function more optimally (Ahmad & Omar, 2015; Schaufeli, 2013; Seligman & Csikszentmihalyi, 2000). One of the positive states that has gained increased research attention since about the turn of the century is the concept of work engagement (Ahmad & Omar, 2015; Ludwig & Frazier, 2012; Roof, 2015; Saks, 2011). Kinjerski and Skrypnek (2008) also implied in their model of paths to spirit at work that spirituality would have a positive impact on work engagement. Work engagement describes the extent to which employees are involved with, committed to, enthusiastic, and passionate about their work (Macey & Schneider, 2008).

Kahn (1990, p. 694) did some of the earliest work on work engagement and defined it as “*the harnessing of organizational members’ selves to their work roles*”. Kahn postulated that when individuals are engaged in their work they give physical, cognitive and emotional expression to their work roles; resulting in a “*personal presence*” at work or a conscious expression of preferred dimensions of themselves through the roles they have to fulfil (Kahn, 1990, p. 700).

Non-engaged employees on the other hand, enter into a state of self-defence where they withdraw physically, cognitively and emotionally from their work.

Where Khan's (1990) focus was on job design, Maslach and Leiter (1997) position work engagement in the field of positive organisational psychology as *part of* work-related well-being. Maslach and Leiter (1997) do not view work engagement as an independent construct. Rather, they see work engagement as the *positive side of burnout*; thus placing work engagement and burnout on opposite sides of the same continuum. They define burnout as including the following elements: exhaustion, cynicism (detachment from the job) and a lack of professional efficacy (ineffectiveness). The opposite of this would then be work engagement which includes the following elements: energy, involvement and professional efficacy.

By far the most influential work on work engagement has been done by Schaufeli and his colleagues. Schaufeli, et al. (2002) also view work engagement as the opposite of burnout, but they differ from Maslach and Leiter (1997) in that they view engagement as a separate construct from burnout that should be measured by means of its own measurement instrument. They define work engagement as "*a positive, fulfilling, work-related state of mind that is characterized by vigor, dedication, and absorption*". Their research findings indicate negative relationships between exhaustion and vigour (energy) as well as between cynicism and dedication – called 'involvement' by Maslach and Leiter (1997). However, they identify a third factor of engagement that is not related to the lack of 'efficacy' factor from Maslach and Leiter's (1997) study – 'absorption'. This third non-related factor demonstrates that burnout and work engagement, although related constructs, are nevertheless independent constructs. Engaged employees therefore experience work as challenging but fun rather than demanding and stressful (Bakker, Leiter, Schaufeli & Taris, 2008).

Macey and Schneider (2008) set out to distinguish work engagement from other closely related but still distinguishable constructs such as job satisfaction and organisational commitment. They warn that most measures in practice that claim to measure work engagement are actually measuring the working conditions in the organisation, organisational culture or climate or

people's satisfaction with their work and organisations and thus inferring engagement from those findings. A good example of this type of overlap is the Q12 measurement instrument used by the Gallup Organisation to measure work engagement.

The Satisfaction-Engagement Approach is the approach to work engagement followed by the Gallup Organisation. They define work engagement as an individual's level of involvement and satisfaction with as well as enthusiasm for their work (Harter, Schmidt & Hayes, 2002). Gallup's engagement concept therefore seems to overlap with other constructs such as job involvement and job satisfaction. The authors acknowledge this overlap by stating that the Q12 assesses "*antecedents to positive affective constructs such as job satisfaction*" (Harter et al., 2002, p. 209). Thus, rather than measuring the *experience* of engagement in terms of involvement, satisfaction and enthusiasm, the Q12 actually measures the antecedents of engagement (Schaufeli, 2013). The Q12 was originally designed from an 'actionability standpoint' and not from a scholarly perspective (Buckingham & Coffman, 1999). For this reason, it is first and foremost a tool for management to improve jobs so that employees would be more satisfied. Nevertheless, Gallup's research has established meaningful links between employee engagement and business unit outcomes, such as customer satisfaction, profit, productivity, and turnover (Harter et al., 2002).

Macey and Schneider (2008) state that a significant exception to the overlap found in engagement measures, is the work done by Schaufeli, et al. (2002) and Schaufeli, Bakker and Salanova (2006). These studies have successfully distinguished job satisfaction and organisational commitment from work engagement and identified the components that constitute work engagement by designing a 9-item measure of work engagement that defines it in terms of three factors: dedication (i.e. commitment); absorption (i.e. involvement) and vigour or energy (i.e. positive affective state).

Vigour refers to high energy, mental resilience and the willingness to invest oneself in one's work and to persist when faced with difficulties (Bakker, Leiter, Schaufeli, & Taris, 2008; Schaufeli, et al., 2002). Dedication refers to how one identifies with one's work (Bakker et al.,

2008) and to a sense of significance or meaning, inspiration, pride and challenge, while absorption refers to being happily engrossed in one's work or experiencing a sense of internal enjoyment of the work itself (Bakker et al., 2008; Schaufeli, et al., 2002). The similarity between absorption and Csikszentmihalyi's (2008) concept of flow has also been noted by some authors (Mauno, Kinnunen & Ruokolainen, 2007; Mills, Culbertson & Fullager, 2012; Rothman & Colff, 2009; Rothman & Storm, 2003).

Csikszentmihalyi (2008) states that persons experience flow when they are completely absorbed in the task they are performing. In a state of flow, one loses track of time and no longer pays attention to one's surroundings. Bakker (2011) as well as Rothman and Storm (2003) denote a difference between flow and absorption by arguing that flow is a more complex construct that depicts short-lived peak experiences whilst absorption implies a more stable and persistent state of mind. The same overlap between flow and spirituality was also found in Kinjerski and Skrypnek's (2006b; 2008) study of spirit at work, where individuals described their experiences of spirit at work as "*a natural high*"; similar to experiencing total bliss, joy and wellbeing or flow.

In light of the above conceptualisations of this construct, work engagement (hereafter referred to as WE for purposes of this study) is considered to be the *opposite of burnout* and yet an *independent construct from burnout* as it describes the extent to which workers are involved with, committed to and passionate about the work they do (Research Works, 2009, p. 1). Engaged employees have a "*sense of energetic and effective connection with their work activities, and they see themselves as able to deal well with the demands of their jobs*" (Schaufeli, Bakker & Salanova, 2006, p. 702). Thus the comprehensive conceptualisation of the construct work engagement as defined by Schaufeli, et al. (2006) is also the definition of this construct adopted in this study. Schaufeli, et al. (2006, p. 702) define work engagement as "*a positive work-related state of mind*" characterised by three different factors: (1) vigour or energy, (2) dedication or commitment and (3) absorption in the task.

7.2 DISTINGUISHING WORK ENGAGEMENT FROM OTHER CONSTRUCTS

Other psychological constructs associated with WE are: job satisfaction, job involvement, organisational commitment, workaholism and job embeddedness (Bakker et al., 2008; Halsbesleben & Wheeler, 2008; Macey & Schneider, 2008; Mills et al., 2012; Rothman, 2008; Saks, 2011; Wefald & Downy, 2009). Although similar, work engagement is different from these other psychological constructs. In order to better understand how these related constructs fit in with engagement, it is necessary to discuss each.

7.2.1 Job satisfaction

Maslach, et al. (2001) define job satisfaction as the extent to which work satisfies the individual's needs. Warr (2007) describes job satisfaction as the level of pleasure experienced when doing a particular job. Wefald and Downey (2009) argue that WE and job satisfaction are the same constructs because they found very high positive correlations between these two constructs. However, Erickson (2005) argues that job satisfaction differs from WE in that job satisfaction is a *passive* state that merely refers to the sense of being satisfied, while engagement refers to an *active* state of energy. For this reason, it could be argued that WE is a more complex construct than job satisfaction. According to Macey and Schneider (2008) job satisfaction when assessed as satisfaction is not in the same conceptual space as WE. However, when job satisfaction is measured as feelings of energy and enthusiasm, it becomes work engagement.

7.2.2 Job involvement

Job involvement is the extent to which an individual relates psychologically to their job (Cooper-Hakim & Viswesvaren, 2005). Macey and Schneider (2008) are of the view that at a causal level, job involvement contributes partially to the conceptualisation of work engagement since “*a state of involvement implies a positive and relatively complete state of engagement*” (Brown, 1996, p. 235). Bass (1999) suggests that when it comes to the self-worth of the individual, there will be higher levels of commitment to the task or the job at hand than to the organisation and

hence higher work engagement. Engagement in this context then becomes willingness to exert effort towards attaining specific task-related goals. May, Gilson, and Harter (2004) therefore conclude that WE is an antecedent to job involvement. Job involvement is therefore seen as a *component* of work engagement, but not equivalent to it (Salanova, Agut & Peiro, 2005), since the construct of work engagement includes energy, *involvement* and efficacy (Maslach, et al., 2001). Macey and Schneider (2008) support this view. What distinguishes job involvement from WE, is that it lacks the energy dimension of WE (Maslach et al., 2001).

7.2.3 Organisational commitment

Some practitioners define work engagement as organisational commitment. Wellins and Concelman (2005, p. 1) for example suggest that “*to be engaged is to be actively committed to a cause*”. Commitment is regarded as a psychological state of attachment (O’Reilly & Chatman, 1986) or a binding force between the organisation and the individual (Meyer, Becker & Van Der Berghe, 2004). Meyer and Allen’s (1997) affective commitment scale identifies belonging, personal meaning and ‘being part of the family’ as components that constitute organisational commitment. Mowday, Porter and Steers’ (1982) measure include the constructs of effort and pride along with the construct of belonging. In Macey and Schneider’s (2008) view, affective commitment can be regarded as a facet of work engagement, when organisational commitment is conceptualised as positive attachment to an organisational entity and measured in terms of willingness to exert effort in support of organisational goals, pride in being a member of the organisation and personal identification with the organisation. However, these constructs are not the same thing. Commitment is but one of the many elements that effectively make up the construct of WE.

Maslach et al. (2001) distinguish between organisational commitment and WE by explaining that organisational commitment focuses on the relationship between the individual and the organisation, while WE refers to the relationship between the individual and the actual work they do. Rothman and Jordaan (2006) build on this argument and postulate that an individual can be engaged in the work they do and at the same time not experience organisational

commitment. This theory is also supported by a study conducted by Winter, Taylor and Sarros (2000).

7.2.4 Workaholism

Bakker, et al. (2008) explain that both engaged employees and workaholics work hard. The key difference is that workaholics are addicted to work and feel a compulsion to work. Workaholism is an addiction, a compulsive, unrelenting need to work (Dictionary.com). Workaholics' obsession with work is all-occupying, which prevents workaholics from maintaining healthy relationships and other outside interests. They are unable to take the necessary precautions in protecting their own health. Engaged employees, although they can become absorbed in work, are able to disengage from work when they need to. Workaholics do not have that ability, and end up with life styles that negatively affect their overall health, the quality of their relationships and consequently also their happiness. The distinguishing factor is that workaholics work due to a compulsion, whilst engaged employees actually work because they are having fun and they enjoy working (Bakker, et al., 2008; Gorgievski, Bakker, & Schaufeli, 2010; Venter, 2012).

7.2.5 Job embeddedness

Yao, Lee, Mitchell, Burton and Sablinski (2004) define job embeddedness as those factors that keep employees in their jobs. Halsbesleben and Wheeler (2008) found a positive empirical correlation between job embeddedness and work performance. However, they concluded from their study that although job embeddedness and WE are related they are still different constructs; since WE is focused on the nature of the work, while job embeddedness, like organisational commitment, is focused on the organisation. They also found support in their literature review by highlighting that the resources that influence job embeddedness differ from the resources that influence WE.

7.3 MEASURING WORK ENGAGEMENT

Most efforts to measure engagement have been at the level of the individual worker (Attridge, 2009). The most often used instrument to measure work engagement is the Utrecht Work Engagement Scale (UWES) developed by Schaufeli and his colleagues. The UWES is a self-report instrument that has been validated in several countries, including China (Yi-Wen & Yi-Qun, 2005), Finland (Hakanen, 2002), Greece (Xanthopoulou, Bakker, Kantas & Demerouti, 2012), Japan (Shimazu et al., 2008), South Africa (Storm & Rothmann, 2003), Spain (Schaufeli et al., 2002), and the Netherlands (Schaufeli & Bakker, 2003; Schaufeli et al., 2002).

The Gallup Organisation also does an annual survey on work engagement and has been quite influential in this space (Harter, Schmidt, & Keyes, 2003; Harter & Schmidt, 2008). Over the last 30 years, Gallup researchers have qualitatively and quantitatively assessed employee perceptions of management practices across a wide variety of industries. The methodology underlying this research has focused on the study of success and productive work groups and individuals. Results of this work have yielded a 12-item Worker Engagement Index. A number of books have also been published (Rath, 2007; Rath & Conchie, 2009; Wagner & Harter, 2006) starting with Buckingham and Coffman's (1991) book where they discussed the 12 questions they used to measure the strength of a workplace and hence the level of work engagement at a particular organisation. These twelve questions were discussed earlier in this chapter as part of the discussion on workplace spirituality. There seems to be a strong link between work engagement and organisational spirituality.

Since Schaufeli et al.'s, (2002) definition of work engagement was adopted as the definition for the construct in this study, it made sense to also use their UWES to measure work engagement in this study.

7.4 OUTCOMES OF WORK ENGAGEMENT

The past decade has witnessed a sharp increase in scientific studies on work engagement (Ahmad & Omar, 2015; Albrecht, 2010; Bakker, Schaufeli, Leiter & Taris, 2008; Macey et al., 2009; Saks, 2011). This research has shown that engagement is related to bottom line outcomes such as job performance (Bakker & Bal, 2010; Halbesleben & Wheeler, 2008), client satisfaction (Salanova, Agut & Peiro, 2005), and financial returns (Xanthopoulou, Bakker, Demerouti & Schaufeli, 2009a; for an overview, see Demerouti & Cropanzano, 2010). Engagement seems to be made up of different psychological states (or at least is correlated with states) such as involvement, attachment, mood (Macey & Schneider, 2008), job satisfaction, and organisational commitment (Saks, 2006; Wefald, & Downey, 2008). However, it is unclear if these psychological states lead to engagement or if engagement leads to these states (Ludwig & Frazier, 2012).

A study of 8 000 business units spanning 36 companies, found that those business units with highly engaged employees had higher levels of customer satisfaction and were more productive. They delivered higher profits and had lower levels of staff turnover and accidents on the job than their counterparts where employees were less engaged in their work (Harter, Schmidt & Hayes, 2002). Engagement therefore offers huge potential benefits to organisations.

Engagement has become a real concern for organisations as studies indicate that only between 17 and 29 percent of employees are actively engaged at work (Lockwood, 2007; Vance, 2006). This means that more than 70 percent of employees are not engaged at work. In fact, around the world, the statistics are as low as 13 percent. Gallup's 2011-2012 study of employees in 142 countries worldwide indicated that only 13 percent of employees around the world are actively engaged at work. Even more shocking is that 63 percent of global employees are disengaged and a massive 24 percent are actively disengaged indicating that they are unhappy and unproductive at work and likely to spread negativity to their co-workers. In rough numbers, this translates into 900 million people around the globe who are not engaged and 340 million who are actively disengaged (Crabtree, 2013). In South Africa, the figures do not look much

better. In fact, only nine percent of South African employees are actively engaged at work. A staggering 46 percent are disengaged and 45 percent are actively disengaged.

Bakker and Demerouti (2008) found that personal traits like optimism, self-efficacy, resilience and self-esteem are significant predictors of WE. They postulate that individuals who possess these traits are more engaged than their counterparts and as a result are more likely to create more personal resources at work that will increase their engagement further. They call this the “*positive gain spiral*” (p. 218). Xanthopoulou, Bakker, Demerouti, and Schaufeli (2009) found that job resources and personal resources influenced each other over time. Therefore, someone with the personal resource of self-efficacy will acquire more job resources over time, which will increase their perception of self-efficacy; creating a self-fulfilling prophecy.

According to Roberts and Davenport (2002, p. 21) highly engaged employees tend to do better work as they are “*motivated by the work itself*”. They are more likely to be committed to their organisations and less likely to leave their organisation, thus reducing the high costs associated with staff turnover and the disruption of business processes. The question here is whether this also relates to those individuals who are spiritual. Would individuals who score high on IS be more engaged in their work than individuals who score low on IS?

De Lange, De Witte and Notelaers (2008) studied the relationship between job resources, WE and staff turnover over time. They found that low job resources and low autonomy lead to the intention to leave over time. Employees with minimal access to resources and low autonomy in their jobs will be dis-engaged and as a result they may start to search for an environment where more job resources are available. They also found that employees who are engaged are more likely to be promoted over time and be given more job resources, thus re-enforcing their intention to stay with the organisation. However, if promotion opportunities are not available for these engaged employees, they will seek an environment where growth opportunities are provided. Promotion opportunities could be associated with opportunities for growth.

Rothman and Jordaan (2006) found a positive relationship between growth opportunities and WE as well as between organisational support and WE. Opportunities for learning and growth is one of the elements of organisational spirituality. As discussed earlier, spiritual individuals would actively seek opportunities for learning and growth. Spiritual organisations would actively work at providing opportunities for learning and growth. Thus perhaps, spiritual organisations would also see an increase in work engagement levels.

Studies have shown that job resources such as social support from colleagues, performance feedback, skill variety, autonomy, and learning opportunities are positively associated with work engagement (Albrecht, 2010; Bakker & Demerouti, 2008). For example, a study of more than 10,000 employees in the United Kingdom, revealed that engagement levels differed depending on personal and job characteristics and work experiences (Robinson et al., 2004). Some of the key findings from this report included that managers and executives tended to demonstrate higher engagement than lower level employees; educated and skilled employees are more engaged than their less educated counterparts; they do tend to demonstrate more loyalty to their profession than their organisation though. Engagement levels decline as length of service with a particular organisation increases. However, those employees who have a personal development plan in place and receive regular feedback from their employers in the form of annual performance appraisals tend to have higher levels of engagement than those who do not. Finally, having an accident or injury at work or experiencing harassment on the job, significantly reduces personal work engagement.

Thus, the level of connection and the number of positive relationships an individual has at work impact on their level of engagement. Furthermore, regular feedback, autonomy in work and higher levels of complexity in the nature of the work the person is required to do, also increases their work engagement. Lawler and Worley (2006) contend that when organisations involve employees in decision-making and provide them with more authority and accountability, maximum employee engagement is obtained. Holbeche and Springett (2003) argue that people actively seek meaning through their work and that people's perceptions of meaning with regard to the workplace are linked to their levels of engagement and, ultimately, to their performance.

Thus, if organisations want to avoid losing valuable employees, they have to actively work at creating a sense of meaning for employees. These elements are all related to spirituality as defined earlier in this chapter, since workplace spirituality is about finding and doing meaningful work and experiencing a meaningful connection with others. There seems to be a connection between spiritual resources and increased levels of work engagement.

7.5 SPIRITUALITY AND WORK ENGAGEMENT

As to why there was an increased interest in work engagement around the turn of the century, Schaufeli (2013) postulates that it relates to what he calls the “*psychologization*” of the workplace. Schaufeli (2013) explains that in the modern workplace, employees are bringing their whole selves to work and are seeking more meaning in what they do at work. Modern organisations need employees who are able and willing to invest in their jobs psychologically. It has become critical for organisations to understand the psychology of employees and to find ways to encourage employees to be more engaged and enthusiastic about the work they do (Ulrich, 1997). Thus the growing importance of human capital and an increased research interest in positive psychological states such as spirituality, necessitates research on work engagement (Ahmad & Omar, 2015; Roof, 2015; Schaufeli, 2013).

Engaged employees experience positive emotions, including gratitude, joy, and enthusiasm (Bakker, 2011). These emotional states are characteristic of spiritual individuals (see the discussion under section 2.1 of this chapter). Crabtree and Robison (2013) believe that engaged employees are most likely to make positive contributions to their organisations, either by attracting and retaining new customers, driving innovation, or simply by spreading their positivity to their co-workers. They argue that emotionally disconnected and disengaged employees represent a serious obstacle to job growth and economic recovery in many countries. Gallup’s research indicates that engaged employees are, on average, more productive, less likely to be absent, and less likely to leave their organisations. A further positive spill-over effect of engagement is that engaged employees not only make their own employers more successful, they also foster entrepreneurship in their communities; helping with economic

growth in their communities and countries. These positive outcomes of work engagement resonate with the positive outcomes of those with high individual spirituality who actively seek to make a difference to others, their organisations, their communities and the world.

According to Ahmad & Omar (2015) empirical research linking workplace spirituality to work engagement is lacking. Only a few studies have considered the relationship between these two constructs. These studies include: (1) Kolodinskey et al., (2008) who found a positive correlation between workplace spirituality and work engagement; (2) Saks (2011) who demonstrated how meaningful work (a dimension of workplace spirituality) influences the degree to which employees are engaged in their work; (3) Rothman and Buys (2011) who found positive correlations between meaning and work engagement; (4) Hirschi (2012) who also found positive correlations between meaningful work and higher levels of work engagement and (5) Roof (2015) who provided empirical support for spirituality as a predictor of higher work engagement. In Roof's (2015) study, spirituality was positively correlated with two of the dimensions of WE – vigour and dedication but not with the last dimension (i.e. absorption).

In Kinjerski and Skrypnek's (2004, 2006b) study, individuals who experienced spirit at work expressed profound feelings of wellbeing and reported feeling love for the members of their work teams. This corresponds with the wellbeing approach to conceptualising WE and resonates with the WE factor of vigour or energy. People who experience spirit at work feel they can be authentic at work and they believe that their work really matters. There is a sense of connection to a higher purpose and value congruence between their personal values and those of the organisation. This aligns with the WE dimension of dedication or commitment.

Furthermore, spiritual individuals seek opportunities for personal growth and development and want to contribute to something greater than themselves. Participants to Kinjerski and Skrypnek's (2004, 2006b) study described having transformative experiences characterised by vitality, energy, bliss, joy and flow whilst working. These experiences echo the WE dimensions of absorption in the task as well as energy or vigour. In light of the positive correlations between personal resources such as self-efficacy and self-esteem and organisational resources such as

opportunities for learning and growth, supervisor support and good leadership, it seems that the experience of spirit at work could perhaps impact on *work engagement*. One could postulate that employees who experience spirit at work, might also influence their co-workers positively. The positive emotions associated with engagement are also associated with spirit at work so one is left pondering to what extent workplace spirituality would increase engagement with a positive spill-over to other employees in a particular work team. The researcher is left questioning whether work engagement could be affected by any or all of the spirituality constructs discussed earlier in this chapter. If one of these constructs does in fact have a positive impact on WE, it would make business and economic sense for an organisation to adopt a spiritual culture and create an environment that fosters the experience of spirit at work in order to gain the competitive benefit of having a more engaged workforce.

According to Saks (2011) workplace spirituality and work engagement are connected in several respects. Firstly, the meaning of both constructs suggest a sense of completeness and wholeness. Milliman et al. (2003) postulate that nearly all academic definitions include a sense of wholeness or completeness as an element of spirituality or mention that spiritual individuals want to live an integrated life. According to Krishnakumar and Neck (2002, p. 158), enabling spirituality in the workplace “*will lead to the employees feeling complete when they come to work*”. Similarly, engagement also involves a sense of wholeness and completeness (Saks, 2011). Engagement requires that a person invest all aspects of his/herself (i.e. physical, mental, emotional) in their work (Kahn, 1990). Rich, Lepine and Crawford (2010) explain that engagement involves a holistic investment of the self into one’s role.

Furthermore, both workplace spirituality and employee engagement involve bringing the complete self into the performance of one’s work role. According to Krishnakumar and Neck (2002, p. 159) when organisations promote spirituality, they are “*encouraging people to bring their whole selves to work*”. Ashmos and Duchon (2000) have also highlighted this aspect of workplace spirituality when they argued that spirituality is about acknowledging that people have an inner being that requires nurturing and seeks personal growth. Kinjerski and Skrypnek (2004, p. 32) argue that authenticity is about being who we are all of the time – even at work.

Spirituality therefore involves the “*integration of an individual’s physical, mental, emotional and spiritual energies at work*”. According to Saks (2011) engagement also involves bringing all aspects of oneself into the performance of one’s role. When people are fully engaged in their work, they bring every aspect of their being into performing their role. When they are disengaged, however, there is an uncoupling of the self from the role they have to fulfil at work (Kahn 1990).

The importance of connection has been highlighted as an element of both spirituality and engagement. As illustrated in this chapter, the definition of spirituality includes a sense of connection and feeling connected to both one’s work and one’s co-workers. Kinjerski and Skrypnik (2004, 2006b) described how individuals experience meaningful relationships with their co-workers and even felt love towards their co-workers. Similarly, when people are engaged they feel emotionally connected to their work and to others (Kahn 1990; Saks, 2011). Kahn (1990) found that people experience meaningfulness and rewarding interpersonal relationships with their co-workers when they are engaged at work. He also found that supportive and trusting interpersonal relationships at work enhanced employees’ level of work engagement.

Both workplace spirituality and employee engagement have been linked to a variety of positive work-related outcomes. Saks (2011) state that there is some evidence that workplace spirituality is related to creativity, honesty, trust and organisational commitment. Similarly, employees who are more engaged are said to be more creative and more productive (Bakker and Demerouti 2008; Saks, 2011). Both workplace spirituality and employee engagement have been linked to organisational performance (Saks, 2011). Thompson (2000) reported that spiritual companies outperformed their competitors by 400% in net earnings, return-on-investment, and shareholder value. Harter et al. (2002) found that business units who were more spiritual were also more customer focused, more productive and more profitable. Macey et al. (2009) found that in a sample of 65 organisations from different industries, the top 25% of organisations on an engagement index were more profitable than the bottom 25% of organisations.

Saks (2011) therefore argues that although workplace spirituality and employee engagement have developed independently of each other, they share sufficient commonalities that justify an investigation of the relationship between these two constructs, since workplace spirituality might be a critical antecedent for employee engagement. Roof's (2015) findings of positive correlations between workplace spirituality and two dimensions of work engagement – vigour and dedication – motivates the need for further exploration of the relationship between workplace spirituality and work engagement in order to either confirm or reject his findings. For the moment, Roof's (2015) findings provide adequate justification for the research interest in the relationship between workplace spirituality and work engagement since workplace spirituality could serve as a predictor of the level of work engagement in a particular organisation. The question is whether an increase in workplace spirituality would lead to an increase in work engagement.

8 ORGANISATIONAL COMMITMENT

8.1 DEFINING ORGANISATIONAL COMMITMENT

Organisational commitment is one of the most researched psychological constructs in management and behavioural sciences (Bell-Ellis et al., 2015; Yalabik et al., 2015). Meyer and Allen (1991) proposed a three-component conceptualisation of organisational commitment that included: (1) a desire to stay with the organisation because the employee experiences feelings of belonging and comfort (i.e. affective commitment); (2) a need to remain employed with the organisation due to the resulting personal costs leaving would incur (i.e. continuance commitment); (3) an obligation to remain employed with the organisation due to the receipt of favours that require repayment and loyalty (i.e. normative commitment).

Affective commitment refers to an emotional attachment to and involvement in one's job. It assumes value congruence between the individual and the organisation. Once an employee is engaged in work and committed to the organisation, it is proposed that meaningful work can ensue as a result. The individual is unlikely to exit the organisation as long as the value

congruence persists. A change in organisational values however, might reduce the emotional connection the individual feels towards the organisation and could result in the individual opting to leave.

Organisational commitment can also be described as the employee's feelings of obligation to remain with the organisation. These feelings can result from the normative pressures that employees experience (Allen & Meyer, 1990; Field & Buitendach, 2011; Viljoen & Rothmann, 2009) and are therefore not necessarily associated with a positive state of mind regarding their employer. Continuance commitment is where the employee is aware of the cost involved for them if they select to leave the organisation. They feel 'locked-in', with no prospect of alternative employment opportunities. The lack of alternative employment opportunities could stem from a constricted job market, or from the individual's lack of education and qualifications or work experience that reduces their employee value proposition to other employers. It could also be that the employee has been with their particular organisation for such a long time, that they do not believe they would be able to adjust to a new career or a new organisational climate and environment. For these reasons, they select to stay with their particular employer.

Lastly, normative commitment is the obligation to continue commitment to the organisation, usually as result of feelings of guilt. This could be because the employer has invested in training and developing the particular employee or perhaps because the employee feels that the company is nice and they do not want to damage the relationship they have built with their employer (Meyer & Allen, 1991; Meyer, Allen & Smith, 1993). In both continuance and normative organisational commitment, it seems therefore that an employee could stay with a particular organisation despite not being happy or productive at work.

To date, Meyer and Allen's (1991) three-component model (TCM) of organisational commitment is still regarded as the dominant model in organisational commitment research (e.g., Bentein, Van Den Berghe, Van Den Berg & Stinglhamber, 2005; Cohen, 2003; Greenberg & Baron, 2003; Kell & Motowidlo, 2012). Solinger, Van Olffen and Roe (2008) criticised the three-component model of organisational commitment, arguing that continuance and normative

commitment does not represent real commitment to an organisation as these states of commitment are based on feelings of hopelessness or guilt and not a positive affective connection. Kell and Motowidlo (2012) contend that Solinger et al. (2008) did not go far enough in their criticism of Meyer and Allen's (1991; 1997) model as they believe the model also lacks the essential cognitive elements required for the conceptualisation or organisational commitment as an attitude. In their view the three-component model does not account for an individual's internalisation of the organisation's values, goals and norms. They propose that employees' beliefs about the appropriateness or inappropriateness of particular types of behaviours in the organisation reveal a lot about a person's internal identification with the organisation's values, goals and norms.

It is perhaps best not to view the three-component model of organisational commitment as a model that requires all three states (i.e. affective, continuance and normative commitment) to be present at the same time, as this was clearly not the intention. Rather, the model describes different levels of commitment to a particular organisation based on the reasons behind someone's chosen attitude towards their organisation. Affective commitment/attachment seems to be the most reliable and strongly validated dimension of organisational commitment (Cohen, 2003; Allen & Meyer, 1996; Meyer, Stanley, Herscovitch & Topolnytsky, 2002) as it implies an emotive connection with and positive intention to stay with a particular organisation (Ko, Price & Mueller, 1997; Solinger et al., 2008).

Both Solinger et al. (2008) and Kell and Motowidlo (2012) contend that only *affective* commitment is actually organisational commitment as the focal point of this type of commitment is the organisation whereas the focal point for continuance and normative commitment is the intention to stay or leave the organisation. This does not imply that the continuous and normative commitment constructs should be discarded – they have proven to be valid predictors of important organisational outcomes (Meyer et al., 2002). However, they should no longer be considered forms of organisational commitment – rather as measurements of an individual's intention to stay with a particular organisation.

Affective commitment therefore conceptually shows the strongest positive relationship with desirable outcomes (Eisenberger, Huntington, Hutchison & Sowa, 1986), such as meaningful work, engagement and job productivity (Hoffman, Blair, Meriac & Woehr, 2007) and most researchers have opted to focus on this type of organisational commitment or attachment to an organisation. The researcher supports the argument that organisational commitment in its truest sense mainly encapsulates affective organisational commitment. For this reason, the operational definition adopted for organisational commitment in this study, is as follows: *organisational commitment* (hereafter referred to as OC for purposes of this study) is an individual's positive psychological attachment to their organisation/employer and refers to *the extent to which the individual identifies with the organisation's goals, objectives and values and is willing to exert effort for the organisation* (Mathieu, & Zajac, 1990; Roberts & Davenport, 2002). A person's willingness to stay with the organisation therefore stems from a sense of belonging and community in the organisation. He/she values the organisation. The assumption is that there would be value-congruence between the individual and the organisation and that the individual would be willing to exert effort on behalf of the organisation (Meyer & Herscovitch, 2001).

8.2 DISTINCTION BETWEEN ORGANISATIONAL COMMITMENT AND WORK ENGAGEMENT

Research has demonstrated a link between work engagement and organisational commitment in the workplace (Field & Buitendach, 2011; Newman & Harrison, 2008; Van Zyl, Deacon & Rothmann 2010; Wefald & Downey, 2009). However, as discussed under section 7.2.3, work engagement and organisational commitment are established as related but nonetheless independent constructs (Gruman & Saks, 2011; Hallberg & Schaufeli, 2006; Schaufeli, Taris, & Van Rhenen, 2008; Schaufeli & Bakker, 2010). The key difference between these two constructs is that organisational commitment focuses on the relationship between the individual and the organisation, while WE refers to the relationship between the individual and the actual work they do. Organisational commitment highlights the individual's identification and involvement with a particular organisation (Mowday et al., 1979), whilst work engagement

entails the involvement by the individual in their work role or the work itself (Schaufeli & Bakker, 2010). Statistically speaking therefore, organisational commitment is a separate latent factor that correlates moderately with work engagement (Schaufeli & Bakker, 2010). Rothman and Jordaan (2006) further postulate that an individual can be engaged in the work they do but at the same time not experience organisational commitment.

Roberts and Davenport (2002, p. 21) explain that *engaged* employees would report that (1) their work makes good use of their skills and abilities; (2) that they find their work challenging and intellectually stimulating and (3) that their work provides them with a sense of personal accomplishment. Those individuals who display high *organisational commitment* (OC) however, would (1) recommend their organisation to a friend as a good place to work for; (2) are proud to work for their particular organisation and (3) think their organisation is doing its best to be or become an industry leader (Roberts & Davenport, 2002, p. 21).

8.3 OUTCOMES OF ORGANISATIONAL COMMITMENT

Organisational commitment has become one of the most frequently studied organisational constructs (Bell-Ellis et al., 2015; Yalabik et al., 2015), because it helps predict such important outcomes as reduced staff turnover and increased organisational citizenship behaviour (OCB) and job performance (Kell & Motowidlo, 2012; Mathieu & Zajac, 1990; Meyer, Stanley, Herscovitch, & Topolnytsky, 2002). Organisational commitment is increased by higher levels of work engagement (Hakenen, Bakker & Schaufeli, 2006; Llorens, Bakker, Schaufeli & Salanova, 2006; Simpson, 2008). One study shows that employees will be loyal to their organisation if they feel their organisation values and appreciates them (Fuller, Barnett, Hester & Relyea, 2003). Organisations that are devoted to the development of employees, their well-being and their need for actualisation tend to have employees with high levels of commitment (Dessler, 1999). As personal growth and development is one of the dimensions of workplace spirituality, one could postulate that a spiritual organisation might see an increase in organisational commitment.

On the other hand, employees who feel their employers fail to keep promises, are less committed and this reduction in commitment seems to lead to lower levels of creative performance (Ng, Feldman & Lam, 2010). Researchers have found a negative relationship between organisational commitment and absenteeism and staff turnover (Bentein, Van Den Berghe, Van Den Berg & Stinglhamber, 2005; Kammeyer-Mueller, Wanberg, Glomb & Ahlburg, 2005). Less committed employees tend to be absent from work more often and tend to opt to leave the organisation sooner than more committed employees.

8.4 SPIRITUALITY AND ORGANISATIONAL COMMITMENT

OC seems to be related to spirituality. With regards to the different dimensions of spirituality, three recent studies merit mention: (1) Stevison, Dent and White (2009); (2) Jabeen Quamar and Ansari (2014) and (3) Daniel and Chatelain-Jardon (2015).

Stevison et al. (2009) conducted an analysis of workers' SAW (using Kinjerski & Skrypnik's (2004) measure of SAW) and the resultant impact on specific behavioural and attitudinal work outcomes. Through the application of Structural Equation Modelling methodology, they found that affective organisational commitment is mediated by SAW. In other words, SAW has a positive effect on affective organisational commitment. The researcher assumes that if employees perceive their organisations as highly spiritual, they are more likely to have spiritual experiences at work and this might impact on their level of organisational commitment to the particular organisation.

Jabeen et al. (2014) conducted a study at Akhuwat, one of the largest micro-finance organisations in Pakistan. They investigated the link between organisational spirituality and organisational commitment. They specifically looked at employees' perceptions of the spirituality of their organisations and how this affected their level of organisational commitment to the organisation. The study was a mixed-methods study with in-depth interviews to determine employee's perceptions about their organisation's level of spirituality followed by a survey to determine employees' level of organisational commitment. Jabeen et al. (2014) defined

organisational spirituality as an alignment with organisational values, a sense of contribution to society, a strong sense of purpose, and trust and respect. This definition was derived from Ashmos and Duchon's (2000) and Kinjerski and Skrypnek's (2004) definitions of workplace spirituality. Thus, they combined OS and SAW into one construct. Furthermore, the construct was not measured through an instrument but rather through the interpretation of interview responses to particular questions around the dimensions of spirituality. They used Meyer and Allen's (1991) three-component model to measure organisational commitment. They compared the qualitative results of the interviews with the quantitative results of the survey to confirm a link between organisational spirituality and organisational commitment.

From the researcher's perspective Jabeen et al.'s (2014) study has certain limitations or weaknesses. Firstly, it would have been more useful for them to survey their respondents on both variables – organisational spirituality and organisational commitment – in order to determine the correlations, if any, *statistically*. Secondly, not clearly distinguishing between OS and SAW also means that it is not possible to clearly indicate whether it is the actual work environment (OS) or the experience of spirit at work (SAW) that contributes more to organisational commitment. Thirdly, it is also important to recognise that true organisational commitment is actually only *affective* organisational commitment as this is a positive emotional attachment to the organisation. Continuance and normative commitment are not considered positive emotional attachments to the organisation (Kell & Motowidlo, 2012; Ko, Price & Mueller, 1997; Solinger et al., 2008). It is therefore expected that there should be a negative correlation between these two dimensions of Meyer and Allen's (1991) three-component model of organisational commitment and workplace spirituality. Jabeen et al. (2014) were not clear on whether there was a positive or negative correlation between these dimensions of commitment and workplace spirituality. It is assumed that no statistical correlation could be established as organisational spirituality was not quantitatively measured.

What was highlighted by Jabeen et al.'s (2014) study though was that interviewees who found their work meaningful and thought that the organisation provided a shared purpose for employees and was serving the community at large, also had higher levels of organisational

commitment. Furthermore, these same employees felt that they were able to enrich their inner lives at work and that they have a real connection with their co-workers. The connection among staff at Akhuwat was described as a 'brotherhood'. These dimensions of spirituality – i.e. meaningful work, an opportunity to express one's inner being and a sense of connection among team members, are all dimensions of workplace spirituality discussed earlier in this chapter. The fact that employees who highlighted these elements of workplace spirituality also demonstrated high levels of organisational commitment could point to a possible relationship between these constructs and thus merits investigating this further in order to find statistical confirmation of these possible correlations.

Daniel and Chatelain-Jardon (2015) specifically focused on the relationship between individual spirituality, organisational commitment and innovative behaviour. A total of 139 individuals in the US were surveyed. These individuals were working in different economic sectors, including health, banking, education, automotive and government sectors. Affective organisational commitment was measured using eight items from Allen and Meyer's (1991) scale. Spirituality was measured using five items from Wheat's (1991) Human Spirituality Scale. Control variables such as age, education and gender were also included. Structural equation modelling was used to analyse the data. Results from the data analysis highlighted the importance of individual spirituality. Individuals with high levels of individual spirituality also had a higher level of affective commitment towards their organisations. The findings from Daniel and Chatelain-Jordan's (2015) study are interesting in light of the current study and warrant further investigation with a larger sample size and perhaps in a different context. This study confirmed a positive relationship between IS and OC. However, the question is still whether positive relationships can also be confirmed between OS and OC and between SAW and OC. Furthermore, one could also investigate which of the spirituality constructs have the biggest impact on OC.

The aim of this study is to better understand the functioning of spirituality by investigating the relationship between the spirituality constructs discussed in this chapter as well as how these variables impact on work outcomes like work engagement and organisational commitment. In the next chapter, the research methodology that was applied to accomplish this aim is

discussed in more detail. Chapter 3 covers sample selection as well as data collection and analysis methods used in this study.

CHAPTER 3

RESEARCH METHODOLOGY

“The beginning of knowledge is the discovery of something we do not understand.”

– Frank Herbert

1 RESEARCH DESIGN AND METHODS

The purpose of this chapter is to discuss the research paradigm and methodology applied in this study to accomplish the overall research aim and specific research objectives discussed in Chapter 1. This chapter commences with an overview of the ontological paradigm underlying this study and then elaborates more on the methodology applied by discussing sample selection as well as data collection and analysis methods. The research was conducted in two phases and for each phase, data collection and data analysis techniques are discussed in detail. Limitations to the research in this study as well as the ethical considerations the researcher had to keep in mind during the process will be highlighted.

The ontological perspective of the researcher in this study, is that of *pragmatism* as conceptualised by Saunders, Lewis and Thornhill (2009). The pragmatic researcher believes that the best way to make sense of reality or answer a complex research question, is to obtain multiple views on the particular phenomenon being researched. The pragmatic researcher argues that the best way to obtain knowledge depends on the nature of the research question since either or both observable phenomena or subjective meanings and interpretations could provide acceptable knowledge on a topic. The pragmatic researcher therefore opts for *mixed methods* or *multiple research designs* that *include both quantitative and qualitative techniques* for collecting and interpreting data.

The research design followed in this study was *explorative, descriptive and explanatory*. To *explore* means finding out “*what is happening; to seek new insights...*” (Robson, 2002, p. 59).

This study explored the functioning of spirituality by investigating the relationship between individual spirituality (IS), organisational spirituality (OS) and the experience of spirit at work (SAW) with the aim of *describing* and *explaining* the nature and the possible direction of the relationship(s) between these constructs as well as their potential impact on positive work outcomes.

A *sequential mixed methods* approach was utilised. In a mixed methods approach, the researcher utilises multiple methods of data collection and data analysis (De Vos, Strydom, Fouché & Delport, 2005). In this particular study, the researcher followed a “*between methods*” approach by drawing on both *quantitative* and *qualitative* data collection procedures (De Vos et al., 2005, p. 357) – i.e. surveys and semi-structured interviews. Utilising both quantitative and qualitative methods allows for a more complete analysis of the research situation (Greene, Cacarelli & Graham, 1989; Tashakkori & Teddlie, 1998) and thus a deeper understanding of the nature of the relationship(s) between the different spirituality constructs.

The benefits of implementing a qualitative phase to the research in addition to the initial quantitative phase, was that it was possible to consider different layers to the research phenomenon (Leedy & Omrod, 2010). Although objectivity in research is the primary goal and some researchers might argue that applying qualitative methods in research could reduce objectivity, qualitative researchers argue that when it comes to human events – i.e. interpersonal relationships, social structures etc. – it is not possible or even desirable to remove all elements of subjectivity as these phenomena often only makes sense when interpreted from the subjective experience of the respondent/participant to the research (Creswell, 2009; Eisner, 1998; Wolcott, 1994). In qualitative research, the researcher’s ability to interpret and make sense of his/her observations during the research process is critical for understanding any social phenomenon (Leedy & Omrod, 2010).

The biggest challenge the researcher is faced with in applying a mixed methods approach, is trying to balance deductive reasoning and inductive reasoning. To make sense of the quantitative data collected, the researcher draws logical conclusions from the statistics obtained

when evaluating the data and basically applies a *positivistic* approach to analysing and interpreting data. During the quantitative phase of the research, the researcher is “*independent from the data and is able to maintain an objective stance in interpreting the data*” (Leedy & Omrod, 2010, p. 119). However, when it comes to analysing the qualitative data, the analytical approach followed to make sense of the data, requires *inductive* reasoning, in other words, drawing conclusions from patterns observed in the data collected and sometimes even during the data collection process. In interpreting the qualitative data, the researcher cannot simply rely on means or medians, but would have to generate an *interpretative narrative* that captures the complexity of the phenomenon that was studied and thus enhances a deeper understanding of the phenomenon (Leedy & Omrod, 2010). In contrast to the quantitative phase where a positivistic stance is adopted, during the qualitative phase, the researcher considers herself part of the process of what is being researched. The researcher is an instrument through which the social phenomena that is studied is interpreted (Leedy & Omrod, 2010). For this reason, interpretations made from the data collected could be influenced by the researcher’s perspective on the world (Saunders *et.al.*, 2009).

The quantitative and qualitative phases of this study, were applied *sequentially*, starting with surveys (quantitative phase) and then following up the findings from the surveys with semi-structured interviews (qualitative phase) to gain insight into the ‘why’ and ‘how’ of the correlations found during the quantitative phase. This enabled the researcher to elaborate on and broaden the findings of one method with another (Creswell, 2009) and ensure richer interpretations of the relationship(s) between the variables.

2 SAMPLING

The researcher applied sequential mixed methods to conduct the research for this study and the same sample of the population was used for both phases of the research. The sample for the qualitative phase of the research was selected from the original sample identified during the quantitative phase of the research. According to Babbie (2001) the purpose of sampling is to select those elements of the population that accurately describe the total population to ensure

generalisability of results. There are two units of analysis for this study. Firstly, there is working people and secondly, there are organisations.

This study was conducted in South Africa. Organisations from different industries in South Africa were initially selected in order to ensure the selection of a diverse range of employees with diverse perspectives on spirituality, religion and meaning in work. This was to ensure randomness in selecting individual participants to the study. Convenience sampling was utilised to select the organisations to participate in this study. Based on referrals from acquaintances and friends, the researcher contacted a parastatal organisation as well as other organisations in the following business sectors: banking and finance, insurance, information technology, industrial chemicals, consumer goods, retail, hospitality, media and education. A letter outlining the purpose of the research and an invitation for the organisation to participate in the research was sent to all potential participating organisations [refer to Appendix A]. In the letter, the researcher introduced herself and her supervisor and outlined the potential benefits for the organisation if they decided to participate in the research study. The research methodology was outlined and confidentiality of the information gathered was guaranteed. Managing 'gatekeepers' fears is critical when approaching organisations to act as research sites (Devers & Frankel, 2000). Of the 20 organisations and institutions approached originally, only four agreed to participate in the study – the parastatal and three private sector organisations: one industrial chemical organisation, one in the information technology industry and one in higher education.

Once an organisation agreed to participate in the study, they were asked to send out a general communication to all staff to urge them to complete the research survey [refer to Appendix B]. It was believed that the response rate to the survey would be higher, if participants were instructed by their relevant organisational leaders to complete the survey as opposed to receiving a request from an outside person. The researcher provided the necessary background and content to the study to inform participants as to why they were being asked to complete the survey.

Once the initial communication about the purpose of the study was sent to all staff in the participating organisations, the researcher provided an electronic link to the survey and a simple explanation of the purpose of the study to the participating organisations to send to their staff. Recipients of the e-mails were urged to click on the link in the e-mail to participate in the study. The researcher therefore did not send out the e-mails herself, but relied on the gatekeepers in each organisation to e-mail their staff the link to the survey.

2.1 SAMPLING PHASE 1

The sampling method used, was *non-probability volunteer sampling* (McLeod, 2014); also known as *self-selection sampling* (Saunders, et al., 2009). The researcher did not know the identities of the respondents beforehand and had to rely on the self-selection of recipients of the e-mails. Usually when people volunteer to participate in a study, they select to participate because they have an interest in the topic (Saunders, et al., 2009). There was no way to gauge beforehand how many participants would volunteer to complete the survey. The benefits of volunteer sampling are that it is convenient and ethically sound if proper consent is obtained. The challenge is that there might be self-select bias since the researcher does not know beforehand who will be completing the survey.

For non-probability sampling, the probability of each case being selected from the total population is not known (Saunders, et al., 2009). For all non-probability sampling – other than quota sampling – the question of sample size is actually ambiguous and there are no fixed rules (Saunders, et.al., 2009). Consequently, one's sample size is dependent on one's research questions and objectives (Patton, 2002). The probability that a particular study will yield significant results is also determined by the level of statistical significance required (Dumičić & Žmuk, 2013; Lenth, 2001). In this particular study, the researcher intended to use structural equation modelling (SEM) in analysing the quantitative data and the data would be subdivided into five key variables. These five variables were made up of 14 different factors that describe the nature of these variables and the 14 factors consisted of 87 different statements that describe the factors that constitute each variable. This translated into a very complex research

model. One of the strengths of SEM is its flexibility, which permits examination of complex associations, use of various types of data and comparisons across alternative models. However, these features of SEM also make it difficult to develop generalized guidelines regarding sample size requirements (Wolf, Harrington, Clark & Miller, 2013). However, various rules-of-thumb have been proposed for determining sample size, including (a) a minimum sample size of 100 or 200 (Boomsma, 1982, 1985), (b) five or ten observations per estimated parameter (Bentler & Chou, 1987), and (c) ten cases per variable (Nunnally, 1967). According to Wolf et al. (2013) such guidelines are problematic because they are not model-specific and may therefore lead to over-or underestimated sample size requirements. Kim (2005) is of the view that sample size for SEM is dependent on the fit indices the researcher will use to determine model fit with the data. Kenny (2014) is of the view that the best way to determine the correct sample size for SEM is to conduct a power analysis.

Models based on larger samples (Boomsma, 1982; Gagné & Hancock, 2006; Velicer & Fava, 1998), with more indicators per factor (Gagné & Hancock, 2006; Marsh, Hau, Balla, & Grayson, 1998), and with larger factor loadings (Gagneé & Hancock, 2006) are more likely to converge properly. According to Wolf et al. (2013) there are three major approaches to evaluating sample size requirements in SEMs: (a) the Satorra and Saris (1985) method, which estimates power based on the amount of model misspecification; (b) the MacCallum, Browne and Sugawara (1996) method, which determines the power of the model to obtain a root mean square error of approximation value that is consistent with good model fit; and (c) the Monte Carlo simulation method (Muthén & Muthén, 2002), which simulates the fit index results desired. With this method, associations among variables are set by the user based on a priori hypotheses.

If the data were to yield significant results at a power level of 0.8 and a probability level of 0.05, a sample size of 500 would be required (Soper, 2016); making this a large sample. This was to ensure meaningful statistics could be drawn from the data. In other words, it was necessary to negate the negative consequences of non-probability sampling by obtaining as many responses as possible to increase the likelihood of a diverse and thus representative sample

population that could yield statistically significant results when the models in this study were tested for fit.

The researcher tried to minimise this risks of non-probability sampling by selecting a volunteer sample from specific organisations to ensure that all respondents surveyed would at least be individuals in full-time employment as this was the only real criteria for selection of the sample. Other than the need to identify individuals who were employed full-time, the researcher did not have any other exclusion criteria. For the first phase of the research, the researcher intended to make the survey available to the full staff compliments of the four organisations that agreed to participate in the research study. The researcher worked off the assumption that the four organisations would have employees from different cultural, ethnic, language and religious backgrounds working there. The intention was to keep the sample as random and diverse as possible in order to obtain a sample that was adequately representative of the working population of South Africa. Due to cost and time constraints, the only way to accomplish this was to opt for non-random volunteer sampling in diverse organisations and to ensure that the request to complete the survey came from the participating organisations to motivate as many employees as possible to complete the survey.

The online survey was created through Qualtrics and responses to the survey were automatically collected and collated in Qualtrics where the researcher was able to download the responses to the survey into an excel spreadsheet for data analysis. The process followed in administering the surveys is discussed in detail under section 3.4 of this chapter.

2.1.1 Response rate in sampling phase 1

According to Babbie (2001) and SurveyMonkey (n.d.), response rates vary widely depending on a number of factors such as survey length and complexity, incentives, and the topic of the survey. For online surveys in which there is no prior relationship with recipients, a response rate of between 20-30 percent is considered to be successful. A response rate of 10-15 percent is usually a more conservative and perhaps also a safer guess when there is no prior

relationship with respondents. The complexity of the research topic and the model being tested in this study, required a long and complicated survey if the researcher was to obtain meaningful data for this study. For these reasons, the researcher anticipated the possibility of a low response rate to her survey.

Due to the nature of the questions being asked and the length of the survey, many recipients of the enticement e-mails opted not to complete the survey because they either felt the survey was too complex or too long. This was evident from a number of e-mails the researcher received from declining respondents indicating that they could not relate to the survey or did not have the time to complete it. It was further evident from the number of reminder e-mails that had to be distributed and the overall lack of response to the survey after six months of persistent requests. Unfortunately, those individuals who did not have access to the Internet, were excluded from completing the survey as it was an online survey and thus required an Internet connection. This meant that often security staff and cleaning staff at the participating organisations were excluded from participation as they did not have access to the survey online and in some instances they could not read or write.

After six months and three reminder e-mails to complete the survey, only 99 people in total responded to the request to complete the survey, which translated into a response rate of a mere 11.25 percent. In addition, 28 of the surveys were incomplete and would thus not be usable for data analysis. This reduced the number of completed and usable surveys to 71 and thus in effect meant a response rate of a mere eight percent.

Saunders, et al. (2009) state that, given the competing influences one needs to consider for an optimal sample size, the final sample size one selects, is almost always a compromise between calculation and judgement. This is exactly what happened in this study. The decision was taken that, given the statistical methods to be applied in analysing the data – i.e. confirmatory factor analyses, structural equation modelling and analyses of variances – a much larger sample size was required. As mentioned already, if the data in this study were to yield significant results at a power level of 0.8 and a probability level of 0.05, a sample size of at least 500 would be

required (Soper, 2016). This was to ensure meaningful statistics could be drawn from the data. In other words, it was necessary to negate the negative consequences of non-probability sampling by obtaining as many responses as possible to increase the likelihood of a diverse and thus representative sample population that could yield statistically significant results when the models in this study were tested for fit. The researcher therefore had to identify an additional population to survey, since 71 cases were simply not enough for the statistical analyses required in this study.

2.2 SAMPLING PHASE 2

The researcher opted to make use of a company that could assist with sampling. iFeedback is an online company that provides research assistance to researchers in the form of a large national database of respondents. Before iFeedback's services could be engaged, it was necessary to evaluate how respondents are selected by iFeedback to participate in research studies. This was to ensure that ethical procedures are applied in the selection of and communication to survey respondents and to ensure a valid sample for the research. iFeedback contacts potential participants and they can then volunteer to participate in research studies. If individuals wish to participate in different research studies, their names and contact details are added onto an internal database. Participants can opt to be removed from the internal database at any time and would thus no longer participate in any research studies. Again this constitutes a form of non-probability sampling as individuals self-select to participate in research studies.

The researcher contracted iFeedback to assist her in obtaining the relevant quota of a minimum of 500 responses for her research. The researcher provided the survey instrument, and the explanatory statement outlining the purpose of the research and the guarantee of confidentiality [refer to Appendix C], and iFeedback managed the electronic distribution of the survey to respondents by distributing e-mails with the link to the survey to respondents on their national database and collecting and collating responses received to the survey. Responses to the survey were collated on iFeedback's server and then sent as an excel spreadsheet to the researcher once a sufficient number of responses had been collected. This meant that

respondents remained anonymous to the researcher as the researcher would not know who was contacted and had to rely on the willingness of recipients to complete the survey and to voluntarily provide their contact details to the researcher for a potential follow-up interview. This was done to ensure consistency with how the first batch of responses were obtained.

During the first round of sampling, the only information the researcher had was the staff compliment of each organisation that the survey would be sent to. Although she was able to keep track of the number of surveys completed in total, individuals were not asked to identify the organisations they worked for. It was therefore difficult to keep track of how many surveys were completed by each participating company. Furthermore, adding the second phase of sampling to the research, made tracking of responses per company irrelevant since iFeedback distributed the surveys nationally and respondents were not asked to identify the companies they worked for. They were only asked to identify the industries they worked in. The reason why they were not asked to identify their employers, was that it would constitute a change in the questionnaire and in order to correlate data from both samples, no changes could be made to the questions in the questionnaire. This ensured consistency in results obtained. Since the researcher did not know which companies the respondents worked for, she cannot draw comparisons of the relations between the variables between different industries and companies.

The only criterion the researcher specifically stated to iFeedback was that the survey should only be sent to people who were employed full-time in organisations. For three months, e-mails were sent to a new batch of 300 individuals every second week. In total, 1 800 individuals were contacted to participate in the study. Of the 1 800 individuals contacted, 750 people responded to the request to complete the survey. That is a total response rate of 41.7 percent which is good considering that none of the respondents knew the researcher prior to them completing the survey and the researcher did not offer any incentives for completing the survey. In cleaning the data, it was found that there were 53 incomplete records that would not be usable in analysing the data. These were excluded from the data set. This left 697 complete and usable survey responses and brought the response rate down to 38.7 percent.

The researcher also still had 71 usable datasets from the first round of sampling that she conducted with the four participating organisations. Combining the 71 complete responses from the first round of sampling with the 697 responses from the second round of sampling yielded 768 usable surveys; 268 more than the targeted 500 responses. Table 8 provides a breakdown of survey response rates from the two separate phases of sampling.

Table 8: Survey response rates (N = 768)

Sampling phase	Surveys sent	Total surveys returned	Surveys returned (incomplete)	Surveys returned (complete)	Response rate (excluding incomplete responses)
Phase 1 (Qualtrics)	880	99	28	71	8.1%
Phase 2 (iFeedback)	1 800	750	53	697	38.7%
Total:	2 680	849	81	768	28.7%

2.3 SELECTING INTERVIEWEES FOR SEMI-STRUCTURED INTERVIEWS – NON-PROBABILITY JUDGEMENTAL SAMPLING

Adding a second phase to the research after completing the survey, meant that the researcher could select specific individuals to provide deeper insight into understanding the relationships between the three spirituality constructs that are examined in this study. Semi-structured interviews provided an opportunity to probe and to elaborate on the individual and organisational factors that affect the direction of the relationship between IS, OS and SAW. Furthermore, it allowed for triangulation of the original quantitative data with the qualitative data which enhances the reliability and trustworthiness of the overall data.

The sampling method used for the qualitative phase of the research was *purposive sampling*. This type of sampling allows the researcher to select those cases which would best enable him/her to answer the research questions. This is a particularly effective technique to use in small samples (Saunders, et.al., 2009) and since the aim of the qualitative phase of the

research is further exploration of the findings from the quantitative phase of the research, a small sample was sufficient.

Results from the first measurement in the survey – i.e. the Human Spirituality Scale that measured IS – was used to identify the interviewees for the qualitative phase of the research. The IS scores for all respondents to the survey were averaged across its three factors and ranked. The researcher then identified those individuals who had the highest and lowest IS scores. Individuals with the highest and lowest scores were selected to conduct interviews with. This allowed the researcher to interview and gain insight from those individuals who were highly spiritual as well as those who were not that spiritual to determine the differences in their experiences of spirit at work. The interviewees selected for the qualitative phase of the research therefore constituted an *extreme case or deviant sample* as explained by Saunders, et.al. (2009) as they are unusual or special. The selection method also represents *homogeneous sampling* to a certain extent. Saunders et.al. (2009) explain that homogeneous sampling allows the researchers to focus on a small sub-group of participants in much greater depth. In this case, the focus was on understanding the highly spiritual individuals and the individuals that are not that spiritual to compare and contrast their experiences.

Using homogeneous sampling also made it easier to identify the required sample size. Guest, Bunce, and Johnson (2006) advises that for research where the aim is to understand the commonalities within a fairly homogeneous group, 12 in-depth interviews would suffice. One of the obstacles the researcher faced in identifying the sample of interviewees, was that not all the respondents to the survey disclosed their identities to the researcher. This meant that a particular respondent could have scored high on IS and would have been identified as part of the sample, but when the researcher wanted to identify the individual, she would discover that the particular respondent did not disclose their identity.

Of the 768 respondents that completed the survey, 22 scored between 4.78 and 5 on a five-point Likert scale and thus had the highest overall scores for IS. The lowest overall IS scores on the five-point Likert scale ranged between 1.33 and 2.94. Of the 768 respondents who

completed the survey, there were 16 respondents that had an overall IS score between 1.33 and 1.94. Of the original 22 individuals with the highest IS scores, only 13 disclosed their identity and were thus contactable. Of the original 16 respondents with the lowest IS scores, only 11 disclosed their identities and were contactable. To ensure that the researcher had an equal number of high and low IS scorers that she could contact, the researcher included three more respondents to the low IS scores list in an attempt to identify more interviewees. These three respondents were the next lowest scores apart from the first 16 that were identified. However, all three respondents had scored a 3 on the five-point Likert scale, so that their IS scores were average rather than low. Nonetheless, the addition of three more respondents to the low IS list helped the researcher identify two more interviewees for the follow-up interviews.

Not all the participants that were contacted agreed to participate in the study. In some instances, there was no response to the researcher's calls or e-mails. The researcher followed-up three times with each participant who did not respond to the original invitation before concluding that the person was not available to be interviewed. The follow-up process is discussed in more detail under the qualitative phase of the research process in section 4.1 of this chapter. Table 9 summarises the 22 survey respondents that scored the highest on IS and the 19 that scored the lowest on IS (16 initial plus the three additional participants). The respondents who did not disclose their identity could not be contacted for follow-up interviews. The remaining respondents in the high or low categories were all contacted for follow-up interviews. Some of the potential participants did not respond to the request for an interview and others declined to be interviewed. Seven individuals with high IS scores agreed to be interviewed and 6 individuals with low IS scores agreed to be interviewed (highlighted in yellow).

Table 9: Interviewee identification and status

HIGH IS SCORES		
Respondent ID	Average IS Score	Status/Outcome of Request
131	5,00	Undisclosed identity
527	5,00	Undisclosed identity
26	4,94	Identified and interviewed
325	4,94	Undisclosed identity
555	4,89	Identified but no response to invitation for interview
629	4,89	Identified but no response to invitation for interview
123	4,89	Identified but no response to invitation for interview
96	4,83	Identified but declined interview
183	4,83	Identified and interviewed
186	4,83	Undisclosed identity
14	4,83	Undisclosed identity
28	4,83	Undisclosed identity
645	4,83	Identified and interviewed
90	4,78	Undisclosed identity
150	4,78	Undisclosed identity
395	4,78	Identified and interviewed
550	4,78	Identified and interviewed
168	4,78	Undisclosed identity
313	4,78	Identified and interviewed
279	4,78	Identified but no response to invitation for interview
251	4,78	Identified and interviewed
764	4,78	Identified but no response to invitation for interview
LOW IS SCORES		
Respondent ID	Overall IS Score	Status/Outcome of Request
431	1,33	Identified but no response to invitation for interview
254	1,67	Undisclosed identity
16	1,83	Identified but no response to invitation for interview
418	2,61	Identified but no response to invitation for interview
409	2,67	Identified but no response to invitation for interview
199	2,67	Undisclosed identity
484	2,72	Undisclosed identity
725	2,78	Identified but no response to invitation for interview
681	2,78	Identified and interviewed

590	2,83	Undisclosed identity
723	2,83	Identified but no response to invitation for interview
640	2,83	Undisclosed identity
66	2,89	Identified and interviewed
441	2,94	Identified and interviewed
60	2,94	Identified but no response to invitation for interview
259	2,94	Identified and interviewed
689	3,00	Undisclosed identity
201	3,00	Identified and interviewed
750	3,00	Identified and interviewed

Table 10 provides an overview of the number of respondents with the highest and lowest IS scores that were contacted and the overall response rate to the requests for semi-structured interviews.

Table 10: Response rate of interview requests

IS Indicator	Number of interviewees contacted	Number of interviewees actually interviewed	Response rate
High IS	13	7	53.8%
Low IS	13	6	46.2%
Total:	26	13	50%

As indicated in Table 10, a total of 13 interviewees agreed to the follow-up interviews. This was a response rate of 50% on the requests for interviews. Considering the purpose of the interviews, the researcher and her research supervisor felt that 13 in-depth interviews were an adequate sample.

3 QUANTITATIVE PHASE OF THE RESEARCH PROCESS

Survey research involves acquiring information about one or more groups of people by asking them questions and tabulating their responses with the ultimate goal of learning more about the group of people (Leedy and Omrod, 2010). For this study a cross-sectional self-administered

online questionnaire was used because it is the most effective method for surveying a large sample population (Leedy & Omrod, 2010). Administering it online also increases its ease of use and makes this method more cost-effective and timely than other survey methods. The economy of design and rapid turnaround in data collection (Creswell, 2009) were key motivations for selecting this method as the data could be collected and analysed relatively quickly before introducing the next phase of the research. One drawback of survey research is that the researcher is ultimately relying on *self-report* data as people often tell the researcher what they believe to be true or perhaps what they think the researcher wants to hear (Leedy & Omrod, 2010).

3.1 SELECTION OF MEASUREMENT INSTRUMENTS

Instruments that measure IS, OS and SAW were discussed in detail in Chapter 2 of this thesis. Five independent measurement instruments – one for each of the variables in this study – were selected to be included in the survey used for this study:

- The Human Spirituality Scale [HSS] (Wheat, 1991) to measure individual employees' expression of IS in their workplace;
- The Organisational Spiritual Values Scale [OSVS] (Kolodinsky *et.al.*, 2008) to measure employees' perceptions of their organisations' level of OS;
- The Spirit at Work Scale [SAW] (Kinjerski & Skrypnek, 2006) to measure individual and organisational experiences of SAW;
- The Utrecht Work Engagement Scale [UWES] (Schaufeli & Bakker, 2003; Schaufeli *et al.*, 2006) to measure work engagement (WE);
- Affective Organisational Commitment Scale [AOCS] (Meyer & Allen, 1991, 1997; Meyer, Allen & Smith, 1993; Rhoades, Eisenberger & Armeli, 2001) to measure affective organisational commitment (OC).

Questions were retained as in the original five instruments and the original Likert-scales used for each instrument were also retained. Each section of the combined survey questionnaire [refer to Appendix D] represents a new instrument. Instructions for completing each section of

the survey is provided at the start of each section. Additional demographic questions were added as a final section to the questionnaire. The five measurement instruments used as well as the additional research questions included at the end of the research questionnaire are discussed in more detail in the next sections.

3.1.1 The Human Spirituality Scale (HSS)

The Human Spirituality Scale (HSS) was developed by Wheat (1991) to measure degrees of personal/individual spirituality. As discussed in Chapter 2, Wheat's (1991) HSS measures all the dimensions of spirituality highlighted in the definition of IS for this study. Furthermore, it is an instrument that does not address religious issues; but rather the broader construct of personal spirituality. This scale was also adapted to the South African context and used by Van der Walt (2007) and by Van der Walt and De Klerk (2014a). For these reasons the HSS was selected to measure IS in this study.

The HSS is a paper-and-pencil-based measure of personal spirituality designed for the adult non-clinical population. It is a self-report inventory which asks respondents to indicate their perceptions of their own spirituality (Pollock, 2007). The scale consists of 20 items (one of which is reverse-scored) and respondents answer using a 5-point Likert scale with values ranging from one (never) to five (constantly) for each item (Pollock 2007; Van der Walt, 2007).

When Wheat (1991) developed the HSS, it was pilot tested with almost 300 subjects (Pollock, 2007). The HSS was initially piloted on 186 adults between the ages of 25 and 65 years. After results were obtained on the original scale, revisions were made and it was administered again to 36 graduate students. A third round of revisions and administration was required. In the third round, the scale was administered to 48 adults between the age of 25 and 65 (Van der Walt, 2007). The final version of the instrument had a reported Cronbach's alpha of .89 for adults between the ages of 25 and 65. Information about the final version of the HSS is presented in Table 11.

Table 11: Final form of the Human Spirituality Scale (HSS)

Content validity	Based on content relevance established by panel of spirituality experts and content coverage extracted from a table of specifications
Reliability	The item discrimination index for each item exceeded .30. Cronbach Alpha = .89
Construct validity	The following analyses were performed: differences between groups; factor analysis and an examination of age and sex differences.

Source: Van der Walt, 2007, p. 121

Content validity was established by a panel of five experts with experience in spiritual matters (Pollock, 2007). In terms of age and gender differences, Wheat (1991) found women to be more spiritual than men. Age effects were not as strong as the impact of gender (Van der Walt, 2007).

Factor analysis supported the construct validity of the HSS and Wheat (1991) concluded that the HSS measures three factors: *larger context, awareness of life and compassion*. Factor 1, i.e. larger context, emerged as a much larger factor than anticipated and included ten items. This factor includes the following elements: (1) altruism/selflessness; (2) truth/justice/morality and (3) meaning in life. Factor 2, i.e. awareness of life, includes the following elements: (1) personal growth and wholeness; (2) connection with life and (3) sacredness/significance of life. This was the smallest and least well-defined of the factors, representing only four items of the inventory (Pollock, 2007). Factor 3, i.e. compassion, includes two elements: (1) sacredness/significance of life and (2) awareness of pain and suffering. Although this factor was not envisioned as part of the instrument originally, it was recognised as a dimension of spirituality and is measured through six items in the instrument (Wheat, 1991).

The HSS has been used in numerous studies of spirituality (Belaire & Young, 2000; Cashwell, Young, Cashwell & Belaire, 2001; Dudeck, 2002; Giacalone and Jurkiewicz, 2003c; Kolodinsky et al., 2008; Landrum & Underwood, 2000; Young, Cashwell & Woolington, 1998; Young, Cashwell & Shcherbakova, 2000). Landrum and Underwood (2000) utilized the HSS in a study of adults over the age of 65 years and reported a Cronbach's alpha of .84 and a factor analysis

yielding similar factors to Wheat (1991). Landrum and Underwood therefore found the instrument to be reliable and appropriate with older adults as well (Pollock, 2007). Dudeck (2002) found the overall HSS to be more reliable than the individual sub-scales of the HSS as measured per factor with a Cronbach alpha of .87 for the overall scale and Cronbach alpha's ranging between .70 and .80 for the sub-scales. Young, Cashwell and Woolington (1998) reported a Cronbach alpha of .81 for the overall HSS. Studies by Young, Cashwell and Shcherbakova (2000); Giacalone and Jurkiewicz (2003c); Kolodinsky et al., (2008) confirm the instrument's reliability, indicating a Cronbach Alpha of .86, .90 and .85 respectively. These factors support the appropriateness of selecting this measurement instrument to measure IS in this study.

3.1.2 The Organisational Spiritual Values Scale (OSVS)

The Organisational Spiritual Values Scale (OSVS) was developed by Kolodinsky et al. (2008). It was adapted from Wheat's HSS by rephrasing items to assess individuals' perceptions of spiritual values exhibited by their organisations. It therefore represents an inverted form of the HSS and is thus ideal to measure OS in this study, since one of the presuppositions of this study (as stated in Chapter 2) is that organisational spirituality is a mirror for individual spirituality where individual spirituality is the *desire* to find meaning, to pursue opportunities for growth and development and to experience community and connection with others and organisational spirituality is about *creating an environment* that is conducive to experiencing meaning, having opportunities for personal growth and development or self-actualisation and self-transcendence and where one can experience connection and community with others through a common purpose.

Like the HSS, the OSVS consists of 20 Likert-type questions with values ranging from one (never) to five (constantly) for each item. Nineteen of the questions are set positively and one is set negatively. In line with the HSS, the OSVS is also divided into three sub-scales: (1) larger context, which includes elements such as altruism/selflessness, truth/justice/morality and meaning in life; (2) awareness of life, which includes the following elements: personal growth

and wholeness; connection with life and sacredness/significance of life and (3) compassion, which includes the two elements sacredness/significance of life and awareness of pain and suffering. The internal consistency reliability estimate for the scale was 0.93, indicating a strong reliability. This scale was used by Kolodinsky et al. (2004; 2008) and by Van der Walt (2007).

3.1.3 Validation of the HSS and OSVS in the South African context

Van der Walt and De Klerk (2014a) examined the construct and measurement validity of both the HSS and the OSVS in the South African context. Since both these instruments were developed in the USA, they questioned the validity and reliability of the instruments if the instruments had to be applied in a different context. The HSS and the OSVS are both described as three-dimensional instruments consisting of three distinct factors (Kolodinsky et al., 2004; 2008; Wheat, 1991). Therefore, when conducting their principal factor analysis (PFA) on these two instruments, Van der Walt and De Klerk (2014a) ran the instruments as three-factor models.

According to Van der Walt and De Klerk (2014a) the three-factor solution for the HSS accounted for 37.5% of the total variance, with factor 1 (i.e. larger context) contributing to most of the variance at 27.7%. Factor 2 (i.e. awareness of life) only contributed 5.5% and factor 3 (i.e. compassion) only contributed 4.3% to the total variance. The three factors of the HSS showed Cronbach alphas of .81, .73, and .62, respectively. Furthermore, the correlations between the factors were all high, suggesting the possibility of a one-factor structure for the HSS. For this reason, the HSS was also tested as a one-factor solution. For the one-factor PFA 19 of the 20 items loaded satisfactorily. However, item 13 failed to load and was removed. A third PFA without item 13 delivered a Cronbach alpha of .88 and explained a total variance of 28.7%. The results of the PFA in Van der Walt and De Klerk's (2014a) study support construct and measurement validity of a 19-item HSS for a South African sample.

With regards to the OSVS instrument, Van der Walt and De Klerk (20014a) again conducted both a three-factor and a one-factor PFA on the instrument. In the three-factor PFA, two factors had eigen values > 1. However, the item values obtained pointed to a one-factor model, since

the first factor had an eigen value of 10.6 and the second factor had an eigen value of only 1.2. The strong indication of a one-factor solution, justified running a second PFA on a one-factor solution for the OSVS. All the items, with the exception of item 13 (which showed no loading), showed satisfactory loadings ($r \geq .25$). Due to the unsatisfactory loading of item 13, Van der Walt and De Klerk (2014a) again decided to remove this item and repeat the PFA on a one-factor solution. This time the PFA obtain satisfactory results with the lowest loading being .45, and the highest being .86. The Cronbach alpha coefficient was .95. The results of the PFA in Van der Walt and De Klerk's (2014a) study thus also support construct and measurement validity of a 19-item OSVS for a South African sample.

3.1.4 The Spirit at Work Scale (SAW)

The Spirit at Work Scale (SAW) was developed by Kinjerski and Skrypnek (2006) with the intention of assessing the experience of spirituality at work. The SAW scale is a paper-and-pencil-based questionnaire consisting of 18 Likert-type items, with values ranging from one (never) to five (constantly) for each item. It is a short, simple, psychometrically sound and easy to administer instrument (Kinjerski, 2013; Kinjerski & Skrypnek, 2006) designed for the adult, non-clinical population. Since Kinjerski and Skrypnek's (2008) model for spirit at work, lay the foundation for understanding SAW in this study, it makes logical sense to select their Spirit at Work Scale to measure SAW in this study.

According to Kinjerski (2013), the instrument was developed in different stages. Stage 1 involved four steps. The first step was to generate questionnaire items through a grounded theory study where 14 highly spiritual individuals were asked to describe their lived experiences of spirit at work. An initial pool of 65 items were generated, based on participants' rich descriptions of their experiences of SAW (Kinjerski and Skrypnek 2004). Step 2 involved comparing and reviewing the instrument against 25 other instruments of related constructs (e.g., spirituality, religiosity, peak experiences, purpose in life etc.). As a result, an additional 34 items were added to the SAW instrument; totalling an item pool of 99 items (Kinjerski, 2013). Step 3 involved member checking. The content validity of the SAW instrument was tested by

asking the original 14 participants to review the 99 items in the instrument. Based on their feedback, 26 items were added to the instrument; leading to a total item pool of 125 items (Kinjerski, 2013). The final step involved a review and selection of the final item pool by experts. The pool of 125 items was critiqued by a different group of six experts attending the Spirituality in Organisation track at the International Academy of Business Disciplines' 15th Annual Meeting in 2003 (Kinjerski, 2013). In order to maximize the content validity of the scale participants were instructed to rate each item (on a scale of 1–6) according to their view on the relevance of each item to the dimension it had been grouped under, the importance of each item to measuring spirit at work overall, and the clarity of each statement. Based on feedback, five items were eliminated. Ninety-eight items with the highest ratings were retained. Four new items were added to reflect experiences that did not emerge from the research, but which were thought by the experts to be essential, resulting in 102 items in total (Kinjerski, 2013).

In phase two, the 102-item instrument generated from phase one was then administered and subjected to validity and reliability testing. The instrument was distributed via e-mail to a large sample of employees, across a wide range of occupations, at a university in Western Canada. 335 responses were received. Six factors with eigen values > 1 were obtained. However, only the first four factors reflected the dimensions of spirit at work.

It was therefore concluded that the SAW scale measures four distinct factors or indicators of the experience of spirit at work: (1) engaging work, (2) sense of community, (3) spiritual connection and (4) mystical experience (Kinjerski, 2013; Kinjerski & Skrypnek, 2006). The first factor – work engagement – represents the cognitive dimension of SAW and is characterised by authenticity; value congruence between one's personal values and beliefs and one's work; and the belief that one is engaged in meaningful work that has a greater purpose. The second factor – sense of community – represents the interpersonal dimension of SAW and is characterised by a sense of connection to others and common purpose. Factor 3 – spiritual connection – represents a spiritual presence and is reflected in a sense of connection to something larger than the self. Lastly the fourth factor – mystical experience – represents the physical dimension of SAW and includes physical sensations and positive affect about work.

Since the goal was to develop a short, psychometrically sound measure, only items with factor loadings greater than .40 on a single factor were maintained (Kinjerski, 2013). The final result was an 18-item instrument with seven items measuring engaging work; three items measuring sense of community; three items measuring spiritual connection and five items measuring mystical experience. The internal consistency reliability estimate for the whole scale was .93 and ranged from .86 to .91 for the four subscales; indicating strong reliability (Kinjerski & Skrypnek, 2006).

To establish further validity for the SAW scale, phase three involved administering the questionnaire to another sample in order to confirm the factor structure obtained from phase two. In this phase, 417 online responses were received. The 18 items from the SAW scale were subjected to an unweighted least squares factor analyses with promax rotation (Kinjerski, 2013). From the scree plot, the same four factors emerged: (1) engaging work (eigen value of 9.46); (2) sense of community (eigen value of 0.93); (3) spiritual connection (eigen value of 1.18) and (4) mystical experience (eigenvalue of 1.69) (Kinjerski, 2013). Consequently, the scale has been validated in both western (Stevenson, Dent & White, 2009) and eastern (Tevichapong, 2009) countries.

3.1.5 The Utrecht Work Engagement Scale (UWES)

The Utrecht Work Engagement Scale (UWES) was developed by Schaufeli and Bakker (2003). It is a self-report questionnaire that measures three dimensions of work engagement: vigour, dedication and absorption (Schaufeli et al., 2006, p. 702). The UWES has been translated into 23 different languages (De Bruin, Hill, Henn & Muller, 2013) and has been widely used (Mills, Culbertson & Fullager, 2012) to measure WE in different occupational groups (e.g., Schaufeli, 2012; Schaufeli & Bakker, 2010; Seppälä, 2013). The three dimensions of WE measured by the UWES, reflect the three dimensions of work engagement described in the definition of WE. Since Schaufeli et al.'s, (2002) definition of work engagement was adopted as the definition for the construct in this study, it made sense to also use the UWES to measure work engagement in this study.

The first factor of the UWES, vigour, is characterized by high levels of energy, effort, resilience, persistence, and motivation to invest in the work. The second factor, dedication, is characterized by involvement in work, enthusiasm, and a sense of pride and inspiration. The third factor, absorption, is characterized by immersion in one's work and a sense that time is passing quickly Schaufeli et al. (2002b).

Originally, the UWES included 24 items, but after psychometric evaluation, seven unsound items were eliminated so that 17 items remain (Schaufeli, et al., 2002). Six of these items measure *vigour*, five items measure *dedication* and the remaining six items measure *absorption*. The UWES was shortened even further to only nine items. Schaufeli et al. (2006) explain that the main reason for shortening the UWES is basically pragmatic. Researchers want to measure a particular construct with the fewest possible number of questions so as not to bother respondents unnecessarily. Besides, long questionnaires increase the likelihood of attrition.

Previous CFA studies on the UWES have in general supported the correlated three-factor structure of the UWES-17 and/or UWES-9 (Seppälä, Mauno, Feldt, Hakanen, Kinnunen, Tolvanen & Schaufeli, 2009). Furthermore, the UWES has been validated in several countries, including China (Yi-Wen & Yi-Qun, 2005), Finland (Hakanen, 2002), Greece (Xanthopoulou, Bakker, Kantas & Demerouti, 2012), Japan (Shimazu et al., 2008), South Africa (Storm & Rothmann, 2003), Spain (Schaufeli et al., 2002), and the Netherlands (Schaufeli & Bakker, 2003; Schaufeli et al., 2002). However, not all researchers were able to verify the correlated three-dimensional structure of the scale (e.g., Rothmann, Jorgensen & Marais, 2011; Schaufeli & Bakker, 2004; Shimazu et al., 2008; Sonnetag, 2003). In some studies, high inter-correlations ranging from .60 to .90 were found among the three factors of the UWES. Researchers consequently also tested a one-factor solution for the UWES (e.g., Balducci, Fraccaroli & Schaufeli, 2010; Hallberg & Schaufeli, 2006; Rothmann et al., 2011; Schaufeli & Bakker, 2003, 2004; Schaufeli, et al., 2006; Shimazu et al., 2008; Sonnetag, 2003; Storm & Rothmann, 2003). The fit to a one-factor structure has also been found to be acceptable. Therefore, there is evidence for both the three-factor solution and the one-factor solution for the UWES. However,

according to Mills, et al. (2012, p. 520), “*the majority of studies have confirmed that the three-factor structure of the UWES is superior to a one-factor, or unidimensional, conceptualization of engagement*”.

The original UWES-17 has encouraging psychometric features for its scores. Internal consistencies (Cronbach’s alpha) typically range between .80 and .90 (Demerouti, Bakker, De Jonge, Janssen & Schaufeli, 2001; Durán, Extremera & Rey, 2004; Mills et al., 2012; Montgomery, Peeters, Schaufeli, & Den Ouden, 2003; Salanova, Schaufeli, Llorens, Peiró, & Grau, 2001; Schaufeli & Bakker, 2004; Schaufeli, Bakker & Salanova, 2006). Despite the length of the overall research questionnaire for this study, the original 17-item UWES was included in the combined survey and used to measure WE in this study, because of its reliable Cronbach alphas. Furthermore, the UWES can be used as an unbiased instrument to measure work engagement because it is deemed acceptable for different racial groups (Storm & Rothmann, 2003) so it was ideal to measure WE in the South African context.

3.1.6 The Affective Organisational Commitment Scale (AOCS)

Meyer and Allen’s (1991, 1997; Meyer, Allen & Smith, 1993) Affective Organisational Commitment Scale (AOCS) was used to assess affective organisational commitment (OC) in this study. Meyer and Allen’s (1990) three-component model (TCM) of organisational commitment consists of three eight-item scales that measure three types of organisational commitment: affective commitment, continuance commitment and normative commitment. However, the researcher concurs with Solinger et al. (2008) and Kell and Motowidlo’s (2012) arguments that organisational commitment should be viewed as an attitude towards the organisation and their postulation that the affective organisational commitment scale is perhaps the most reliable and strongly validated dimension of organisational commitment (Cohen, 2003; Allen & Meyer, 1996; Meyer, Stanley, Herscovitch & Topolnytsky, 2002). For this reason, **only** the ***affective*** organisational commitment scale of the TCM was applied in this study.

The affective organisational commitment scale (AOCS) consists of 12 items, measuring an employee's general affective response towards their organisation. According to Geldenhuys et al. (2014) the AOCS measures three dimensions, namely (1) a strong belief in, and acceptance of, the organisation's goals and values – i.e. value congruence; (2) a willingness to exert considerable effort for the organisation and (3) a strong desire to remain a member of the organisation. However, other researchers that have used Meyer and Allen's Affective Organisational Commitment Scale report that it forms a single factor with high reliability (Allen & Meyer, 1990; Hackett, Bycio & Hausdorf, 1994; Meyer, Allen & Gellatly, 1990). Internal consistency for the AOCS ranges from .74 to .89 (Allen & Meyer 1990; Allen & Smith 1987; Bobocel, Meyer, & Allen 1988; McGee & Ford 1987; Meyer & Allen 1984, 1986; Meyer, Paunonen, Gellatly, Goffin & Jackson, 1989; Withey 1988). Allen and Meyer (1990) also reported that the AOCS correlated .83 with the full Organisational Commitment Questionnaire. The questions that were selected for this study were derived from the questions selected by Rhoades et al. (2001) for their study on the contribution of perceived organisational support to affective organisational commitment. This scale displays good psychometric properties and has been used to measure affective organisational commitment in different types of jobs (Geldenhuys et al., 2014).

3.2 ADDITIONAL QUESTIONS

Two sections with organisational background questions were added to end of the questionnaire to obtain additional data on participants' experiences of their working environment. These questions relate to perceived organisational support, organisational rewards, procedural justice and/or participation in organisational decision-making and the relationship between the participant and his/her supervisor. Answers to these questions provided the researcher with possible explanations for high or low OS scores. These possible explanations/reasons were then probed further in the follow-up interviews.

Fifteen demographic and life orientation items were added to the end of the questionnaire in order to provide data on demographic differences between respondents. Demographic

information requested includes position in the organisation; gender; ethnical grouping; age; marital status; educational level/highest qualification; length of employment with current employer; religious orientation and strength of religious conviction. The purpose of the demographical questions is firstly to control for external variance, and secondly to determine if and how IS, OS and SAW respectively varies according to and with differences in demographic variables.

3.3 PILOT STUDY

It is good practice to pilot a measurement instrument before administering it. This is to ensure understandability and readability as well as to determine the length of time it will take to complete the questionnaire. A pilot study entails circulating the questionnaire to a small group of participants who are not part of the sample group that will be surveyed for the actual research and to make changes to the questionnaire in line with feedback received from the test group.

A pilot was conducted with nine respondents who would not form part of the final sample. The link to the survey was set up in such a way that a participant could complete part of the survey, log off and then return to the survey at a later stage to continue completing it. This was done to accommodate the length of the survey, keeping in mind that people might not have 30 minutes of uninterrupted time to complete the survey. However, during the pilot, it was found that when a respondent logged back into the survey to continue completing it, the system would jumble responses and a different respondents' responses would load. The respondent would therefore not only not be able to complete the survey, but would also see the responses of another respondent. This had huge implications for privacy and confidentiality and also meant that data would be invalid. So the link to the survey needed to be corrected and resent to check that respondents could access their survey at the point where they had last stopped answering the survey. It was necessary to do a second pilot of the survey, because of technical difficulties experienced with the survey during the first pilot. The same nine respondents were therefore asked to complete the survey again. During the second pilot all the technical issues were resolved and it was then possible to administer the survey. It was not necessary to rephrase

any of the survey items as feedback from both pilots indicated that the items were sufficiently understandable. From the feedback obtained during the pilot studies, the researcher was able to determine that it would take approximately 30-40 minutes to complete the survey.

3.4 SURVEY PROCEDURE AND ADMINISTRATION

A letter outlining the purpose of the research and an invitation for the organisation to participate in the research was sent via e-mail to all organisations who would potentially participate in the study [refer to Appendix A]. In the letter, the researcher introduced herself and outlined the potential benefits for the organisation if they decided to participate in the research study. The research methodology was briefly outlined and confidentiality of the information gathered guaranteed. This was done for ethical reasons and to manage gatekeepers' fears (Devers & Frankel, 2000).

Once an organisation agreed to participate in the study, they were asked to send out a general communication e-mail (that included a link to the survey in the e-mail) to all staff to urge them to complete the research survey [refer to Appendix B]. It was believed that the response rate to the survey would be higher, if participants were instructed by their relevant organisational leaders to complete the survey as opposed to receiving a request from an outside person. The researcher provided the necessary background and content to the study to inform participants as to why they were being asked to complete the survey. The questionnaire was administered in English, because English is the official business language of South Africa. Administering the questionnaire in English also meant that the integrity of the measurement instruments were retained.

Babbie (2001) suggests beginning a self-administered questionnaire with basic instructions on how to complete it. It is important to indicate clearly how questions should be answered but to keep instructions simple and short to avoid confusing respondents. The researcher included a short introduction to the questionnaire at the start of the questionnaire and provided more specific instructions for completion under each section [refer to Appendix D].

Bailey (1994) advises that the first questions on the questionnaire should be easy to answer. It is advisable to leave the more complex or personal questions for later in the questionnaire when the respondents feel more comfortable. Unfortunately, all of the questions in this particular questionnaire could be perceived as threatening or personal as they measure attitudes, beliefs and orientations that are deeply personal and intense. Apart from the demographic questions, all the other instruments used Likert-type scales. The original ranges of each measurement instrument was retained to avoid jeopardising the validity and reliability of the scales.

The questionnaire was developed using Qualtrics, which provides an online platform for the development and distribution of questionnaires. All the survey questions were captured online and an external link was created that could be e-mailed to respondents. This link was then included in an e-mail outlining the purpose of the research and detail around confidentiality and voluntary participation. Recipients of the e-mails with the link to the survey were asked to click on the link if they consented to participating in the survey. During the first phase of sampling this e-mail with the link to the survey was distributed by the participating organisations. Responses to the survey were collated and stored on the Qualtrics system.

For the second phase of sampling, the survey had to be re-created onto iFeedback's platform for distributing surveys. iFeedback then distributed an e-mail explaining the purpose of the study. This e-mail included a newly created link to the survey that collated responses to the survey onto iFeedback's system. Respondents again agreed to participate in the research study by clicking on the link in the e-mail that would then load the online questionnaire in a new tab. Clicking on the link and completing the questionnaire, indicated consent to participate in the study, as respondents could opt not to click on the link and not to complete the questionnaire.

The questionnaire was set up in such a way that respondents could complete part of it, log off and then return to the part of the questionnaire they had last completed at a later stage to complete the rest of it. They were able to log on multiple times until the entire survey was completed. To control reliability and validity of the data, respondents were specifically asked to

complete the survey in person and instructed that they should rather not complete it if they were unable to complete it themselves. In the survey, they were asked to provide their names and contact details if they were willing to participate in a follow-up interview with the researcher. This was the only way the researcher could obtain the contact details of respondents to select the sample of interviewees for the qualitative phase of the research from the original sample of survey respondents. It meant that if a respondent provided their contact details, the survey was not anonymous.

Qualtrics allows the researcher to keep track of the number of surveys completed at a certain point in time. The researcher monitored the response rate to the survey and requested the participating organisations to resend the link with a reminder e-mail to potential respondents to complete the survey. Those who had already completed the survey were thanked for their participation and were asked to ignore the reminder e-mails. Reminder e-mails were sent at the following intervals: the first e-mail was sent one month after the initial e-mail requesting participation in the study was sent. The second reminder e-mail was sent two months after the first reminder e-mail and the third reminder e-mail was sent another two months after the second reminder e-mail. The researcher had to rely on the participating organisations to send out the reminder e-mails and requested that she be notified when the e-mails went out. Only two of the companies granted the requests to send out reminder e-mails. One company only sent out one reminder e-mail and the last company was not willing to send out any further reminders.

The data collected from Qualtrics were downloaded into an excel spreadsheet. The data were checked for completeness. If respondents did not complete all of the first five sections of the survey – i.e. those instruments measuring the key variables in the study (IS, OS, SAW, WE and OC), the data sets were discarded as it would yield incomplete and invalid results. As discussed in section 2.1.2 of this chapter, the response rate to the survey was very low and excluding incomplete responses reduced the response rate further.

After six months, it was clear to the researcher that she would not obtain sufficient responses to the survey and she initiated a second phase of sampling engaging the services of iFeedback. The researcher provided the survey instrument, and the explanatory statement outlining the purpose of the research and the guarantee of confidentiality [refer to Appendix C], and iFeedback managed the electronic distribution of the survey to respondents. Responses to the survey were collated on iFeedback's website and then sent as an excel spreadsheet to the researcher once a sufficient number of responses had been collected.

The researcher was granted access to iFeedback's system and was able to track responses to the survey. She also requested feedback from iFeedback directly on a monthly basis to keep track of responses. For three months, e-mails were sent to a new batch of 300 individuals every second week. One reminder e-mail was sent out to remind respondents to complete the survey two months after the initial e-mails had been distributed. Once the requisite number of responses were obtained, iFeedback provided the researcher with an excel spreadsheet with all the data collected so that the researcher was able to analyse the data. In the cleaning of the data, the same principle was applied that was applied during the first round of sampling. If data were missing or incomplete in the first five sections of the survey – i.e. those sections that measured the key variables in the study – the data sets were not included for data analyses as they would yield unreliable results.

All the data sets from both sampling phases were combined into one comprehensive excel spreadsheet and each respondent was allocated a unique ID in order to be able to identify respondents later for the follow-up interviews.

3.5 SAMPLE DESCRIPTION FOR QUANTITATIVE PHASE

The following section describes the demographics of the survey respondents.

With regards to hierarchical or seniority levels of respondents, Table 12 and Figure 5 provide a breakdown of the generic organisational positions or seniority levels of respondents.

Table 12: Seniority level/position distribution of respondents (N = 768)

Job Level/Position	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Top Management	559	72,8	559	72,8
Middle Level Management/Head of Department or Section	97	12,6	656	85,4
Lower Level Manager/Team Leader	34	4,4	690	89,8
Entry Level/Junior Employee	17	2,2	707	92,1
Independent Contractor	24	3,1	731	95,2
Administrative	9	1,2	740	96,4
Other	26	3,4	766	99,7
Missing	2	0,3	768	100

The vast majority (i.e. 72.8%, N = 559) of respondents to the survey are at top management level. The second group that responded the most to the survey, are middle level managers (12.6%, N = 97). There are very few respondents on any of the other levels of management – a mere 14.3% (N = 110) in total. It is evident from Table 12 and Figure 5 that the sample of respondents are not representative of management levels in organisations.

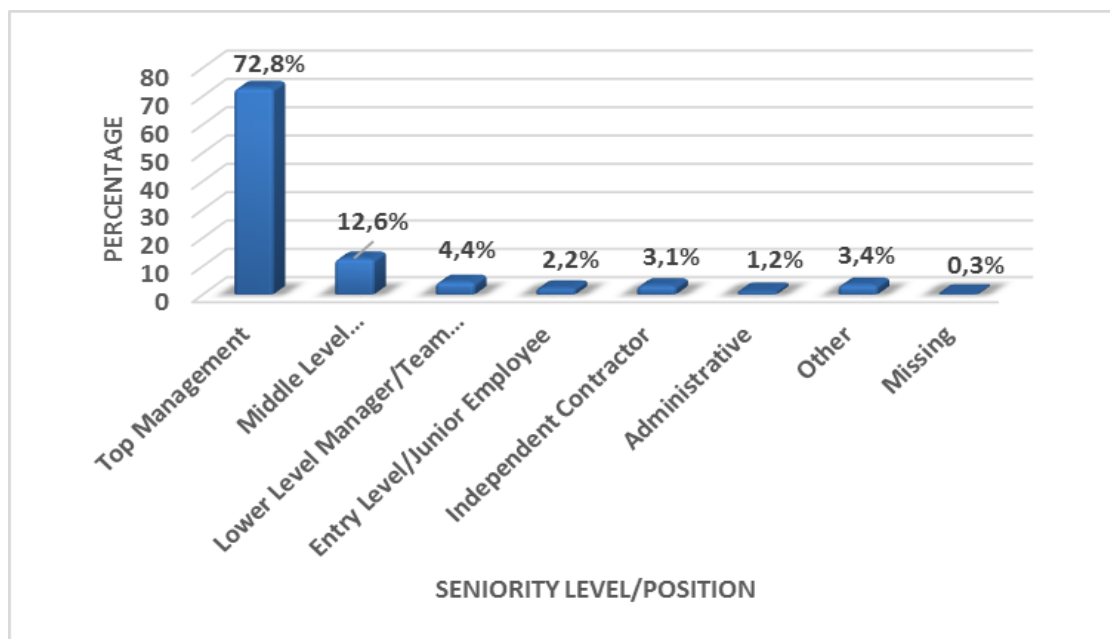


Figure 5: Seniority level distribution of respondents

The uneven distribution of respondents across different hierarchical levels of the organisation thus predominantly provides the views of those that determine the policies and the culture in organisations and not those that experience or perceive the work environment created by the leaders of the organisation.

The gender distribution of the sample is show in Table 13 and Figure 6.

Table 13: Gender distribution of respondents (N = 768)

Gender	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Male	509	66,3	509	66,3
Female	258	33,6	767	99,9
Missing	1	0,1	768	100

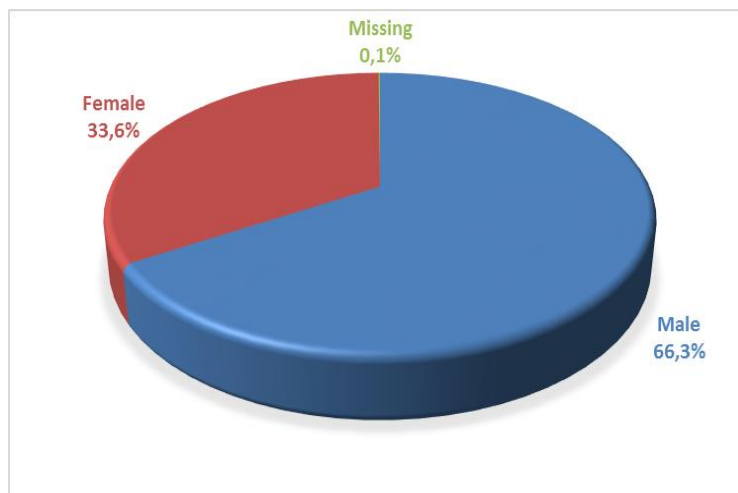


Figure 6: Gender distribution of respondents

Male respondents (N = 509) constitute two thirds of the respondents, i.e. 66.3% while the female respondents (N = 258) represent one third of the respondents, i.e. 33.6%.

The ethnic distribution of the sample is illustrated in Table 14 and Figure 7.

Table 14: Ethnicity of respondents (N = 768)

Ethnicity	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Black /African	43	5,6	43	5,6
White	653	85	696	90,6
Coloured	23	3	719	93,6
Indian	30	3,9	749	97,5
Asian	2	0,3	751	97,8
Other	10	1,3	761	99,1
Missing	7	0,9	768	100

The majority of respondents (i.e. 85%, N = 653) are Caucasian (White). 5.6% (N = 43) of respondents are Black/African; 3% (N = 23) of the respondents are Coloured; 3.9% (N = 30) are Indian and 0.3% (N = 2) are Asian. This means that the sample is severely distorted in favour of the Caucasian population and thus not representative of the working population in South Africa.

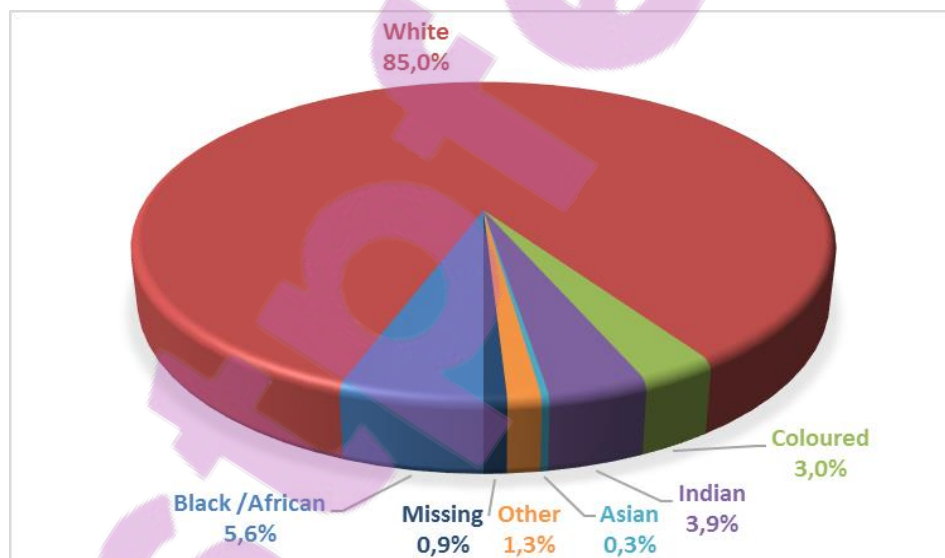


Figure 7: Ethnicity of respondents

The age distribution of participants shows a more even spread. The age distribution is shown in Table 15 and Figure 8.

Table 15: Age distribution of respondents (N = 768)

Age Category	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
18-29 years	35	4,6	35	4,6
30-39 years	99	12,9	134	17,4
40-49 years	207	27	341	44,4
50-59 years	259	33,7	600	78,1
60 + years	166	21,6	766	99,7
Missing	2	0,3	768	100

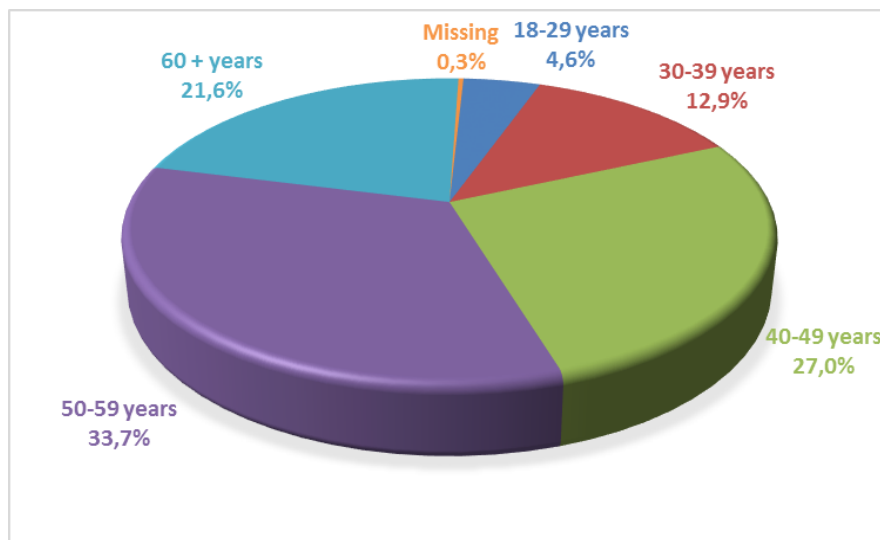


Figure 8: Age distribution of respondents

A significant number of respondents (i.e. 55.3%, N = 425) are above the age of 50. This is more than half of the sample of respondents. The age distribution can be expected considering how many of the participants hold top management or middle level management positions in their organisations (85.4%).

The marital status of respondents is depicted in Table 16 and Figure 9.

Table 16: Marital status of respondents (N = 768)

Marital Status	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Single	78	10,2	78	10,2
Married	562	73,2	640	83,3
Unmarried but co-habiting with a partner	49	6,4	689	89,7
Separated	3	0,4	692	90,1
Divorced	61	7,9	753	98
Widowed	13	1,7	766	99,7
Missing	2	0,3	768	100

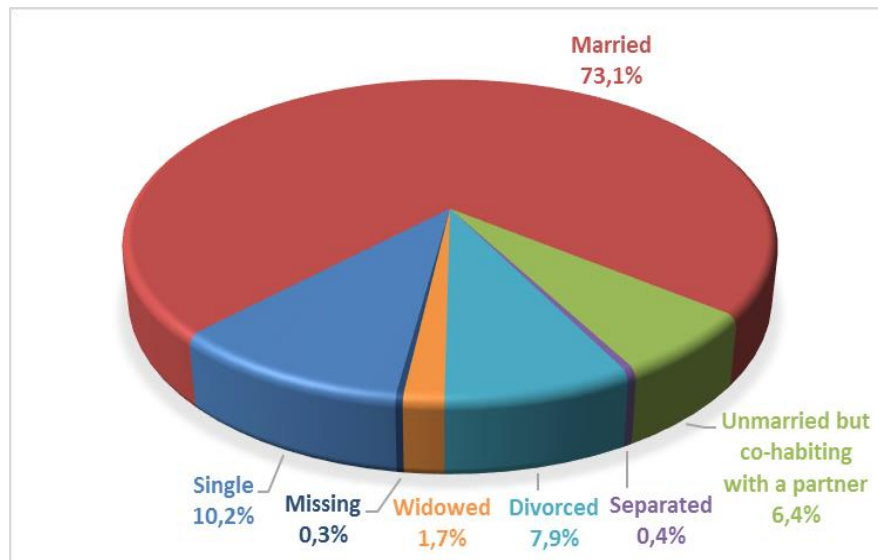


Figure 9: Marital status of respondents

Almost three quarters of the respondents are married (73.1%, N = 562).

Table 17 and Figure 10 provide a breakdown of the highest qualifications for the respondents.

Table 17: Qualifications of respondents (N = 768)

Qualification	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Grade 10-11/Standard 8-9	12	1,6	12	1,6
Grade 12/Standard 10 or equivalent	84	10,9	96	12,5
Post-school certificate/diploma	87	11,3	183	23,8
National diploma/National higher diploma	106	13,8	289	37,6
Bachelor's degree or equivalent	144	18,8	433	56,4
Honour's degree or equivalent	144	18,8	577	75,1
Master's degree or equivalent	160	20,8	737	96
Doctoral degree or equivalent	29	3,8	766	99,7
Missing	2	0,3	768	100

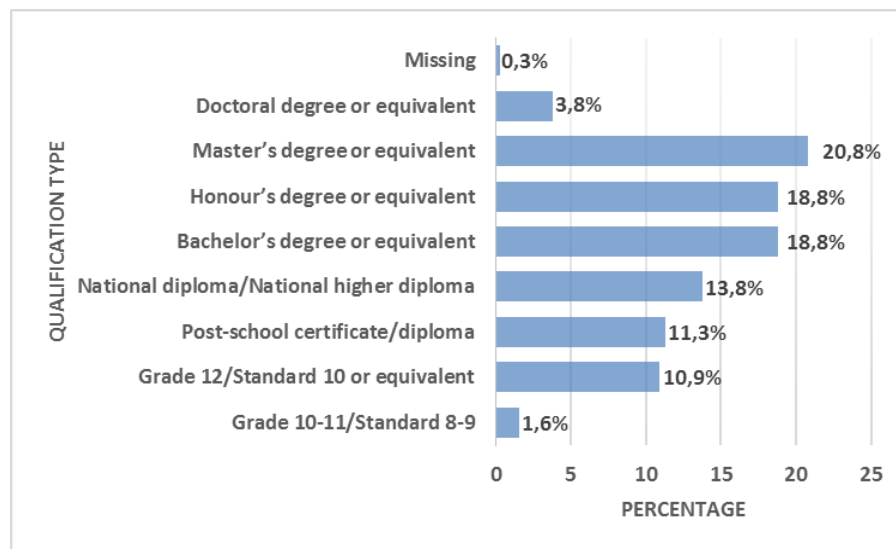


Figure 10: Qualifications of respondents

With 43.4% (N = 333) of the respondents in possession of a post-graduate qualification and almost a quarter (i.e. 24.6%) of participants with master's and doctoral qualifications, the sample can be seen as a highly educated group of people. One can conclude from the distribution of qualifications among respondents that the sample of respondents is a true "white-

collar” sample. Care should thus be taken to not to generalise any of the results to blue-collar workers or to any other sample who significantly differs in qualifications from the current sample.

Table 18 and Figure 11 indicate the number of years’ respondents have been employed with their current employer.

Table 18: Number of years with current employer (N = 768)

Years with Employer	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Less than one year	26	3,4	26	3,4
1-2 years	30	3,9	56	7,3
3-5 years	99	12,9	155	20,2
6-10 years	158	20,6	313	40,8
10-15 years	151	19,7	464	60,4
16-20 years	106	13,8	570	74,2
21-25 years	76	9,9	646	84,1
26-30 years	57	7,4	703	91,5
More than 30 years	63	8,2	766	99,7
Missing	2	0,3	768	100

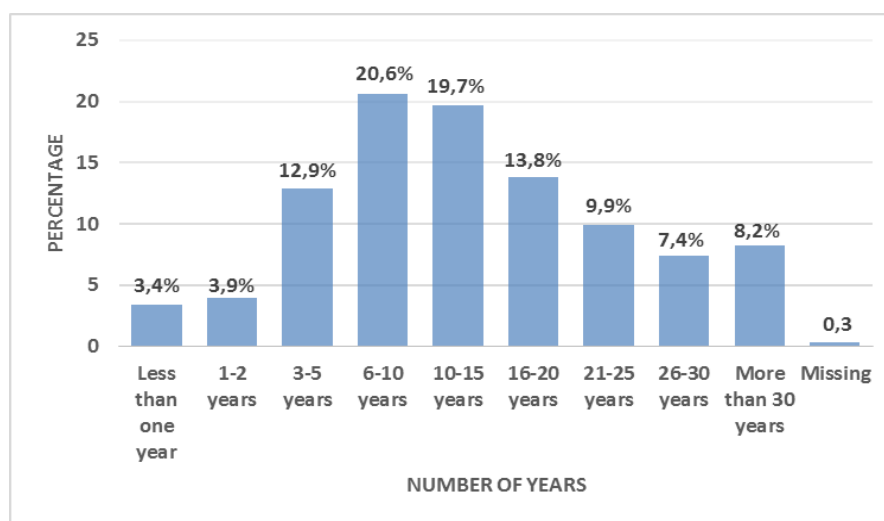


Figure 11: Number of years with current employer

With the majority of respondents having been with the same organisation for between six and ten years (20.6%, N = 158) or between 10 and 15 years (19.7%, N = 151), it is evident that the respondents have long tenures with their respective employers. Almost 80% (i.e. 79.6%, N = 611) of respondents have more than 5 years of employment with the same employer.

The number of respondents who indicated that they have made a substantial career change and those who have not, are show in Table 19 and Figure 12.

Table 19: Respondents who have made substantial career changes (N = 768)

Career Change?	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Yes	487	63,4	487	63,4
No	279	36,3	766	99,7
Missing	2	0,3	768	100



Figure 12: Respondents who have made substantial career changes

The majority of respondents (i.e. 63.4%, N = 487) indicated that they have made substantial career changes somewhere in their working life.

Table 20 and Figure 13 indicate the respondents' satisfaction with their career progression to date.

Table 20: Satisfaction with career progression (N = 768)

Level of Career Satisfaction	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Completely dissatisfied	22	2,9	22	2,9
Dissatisfied	51	6,6	73	9,5
Neutral	73	9,5	146	19
Satisfied	323	42,1	469	61,1
Very satisfied	297	38,7	766	99,7
Missing	2	0,3	768	100

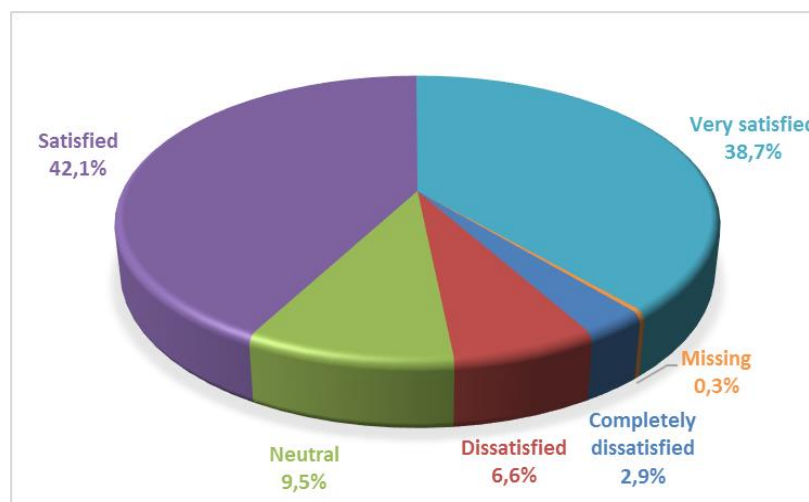


Figure 13: Satisfaction with career progression

The majority of respondents (i.e. 80.8%, N = 620) are positive about their career progression to date. One could deduce that perhaps a substantial career change might have played a role for some of the respondents as 63.4% (N = 487) of respondents also made a substantial career change as indicated in Table 19 and Figure 12. Furthermore, the respondents are highly qualified and therefore “white collar” workers. One can speculate that this could mean that they engage in work that is more intellectually stimulating and might therefore feel satisfied with their career progression.

Table 21 and Figure 14 indicate respondents' happiness levels at work.

Table 21: Happiness at work (N = 768)

Happiness at Work	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Very unhappy	32	4,2	32	4,2
Unhappy	35	4,6	67	8,7
Neither happy or unhappy	94	12,2	161	21
Happy	342	44,5	503	65,5
Very happy	263	34,2	766	99,7
Missing	2	0,3	768	100

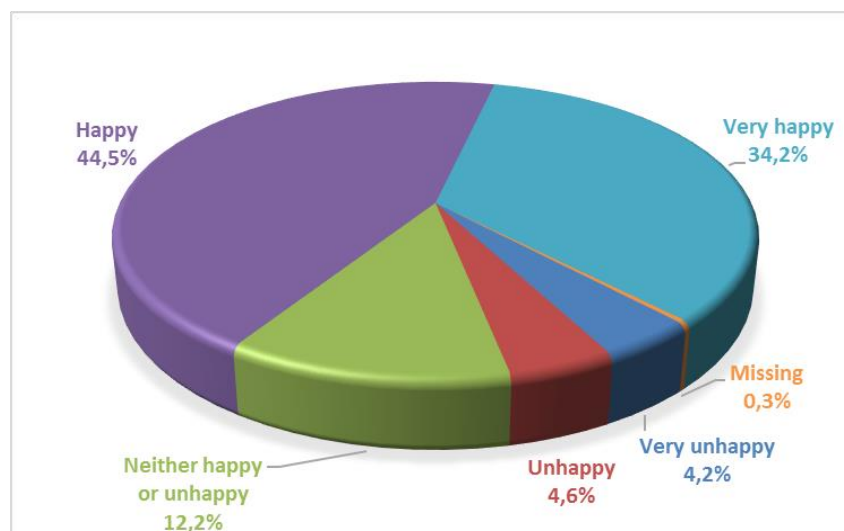


Figure 14: Happiness at work

A similar trend is highlighted with happiness levels at work as with levels of satisfaction with career progression. Once again, the majority of respondents (i.e. 78.8%, N = 605) indicate that they are either happy (44.5%, N = 342) or very happy (34.2%, N = 263) at work. One can speculate that the levels of happiness at work could be related to the fact that 72.8% (N = 559) [see Table 12 and Figure 5] of respondents are part of top management in their respective organisations which mean they have a lot of control over the direction the organisation is moving in and they also have a lot of control over their working environment. Respondents' happiness

at work could also be tied to their level of career satisfaction as 80.8% (N = 620) of respondents are positive about their career progression to date, as indicated in Table 20 and Figure 13.

Table 22 and Figure 15 indicate how many respondents would continue to work if they won the lottery and did not have a financial necessity to work anymore. Table 23 and Figure 16 indicate how many of those respondents would still continue to work in the same organisation after winning the lottery and if financial security did not necessitate that they stay with their current organisations.

Table 22: Respondents who would continue to work after winning the lottery (N = 768)

Continue to work after winning the lottery?	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Yes	579	75,4	579	75,4
No	187	24,3	766	99,7
Missing	2	0,3	768	100

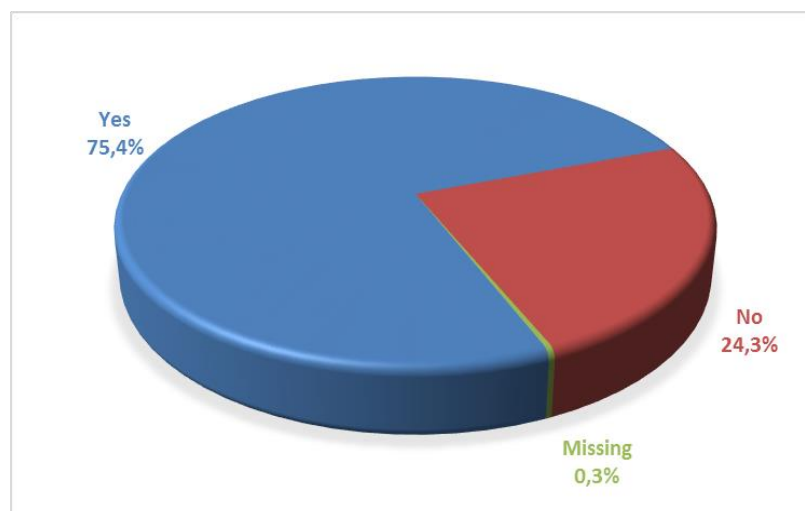


Figure 15: Respondents who would continue to work after winning the lottery

Interestingly, the majority (i.e. 75.4%, N = 579) of respondents indicated that they would continue to work even if they won the lottery. These findings correspond with a 2013 Gallup study (see Newport, 2013) and a US Harris Poll conducted in 2014 by CareerBuilder on whether people would continue to work if they won the lottery and did not need to work. According to

the Gallup study 69% of American employees say they would continue working even if they won \$10 million in the lottery. Only 31% of workers indicated that they would quit their job if they were financially independent and did not need to work (Newport, 2013). CareerBuilder (2014) polled 3 372 workers across industries and company sizes. The findings of the poll indicate that more than half (i.e. 51%) of employees would continue to work after winning the lottery, even if they did not need a job financially. Furthermore, 30% of all employees would opt to stay in their current job if they won the lottery. The high positive response to this question corresponds to the high levels of career progression satisfaction (Table 20 and Figure 13) as well as with the high levels of happiness at work as indicated in Table 21 and Figure 14. One could assume that these individuals would continue to work after winning a large sum of money through the lottery, because they enjoy working and are satisfied and happy at work.

Table 23: Respondents who would continue to work at the same organisation after winning the lottery (N = 575)

Continue to work for same organisation?	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Yes	488	84,9	488	84,9
No	87	15,1	575	100

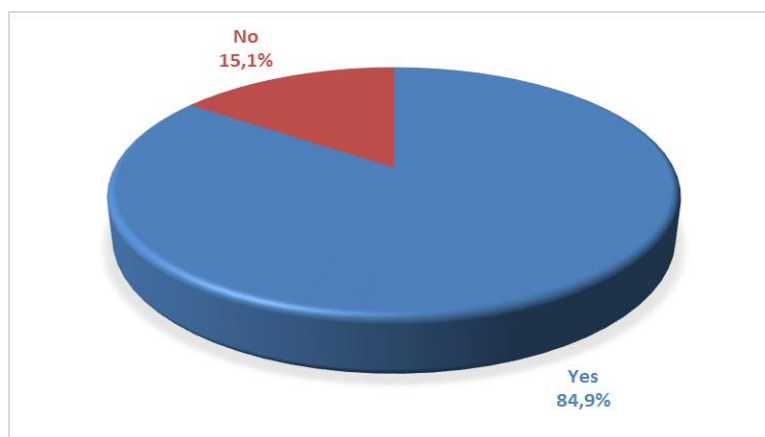


Figure 16: Respondents who would continue to work at the same organisation after winning the lottery

The majority of respondents (i.e. 84.9%, N = 488) indicated that they would continue to work at the same organisation if they won the lottery. These findings again align with the findings from the CareerBuilder (2014) study where 30% of the employees who indicated that they would continue to work after winning the lottery, also indicated that they would opt to stay in their current job and with their current organisation. Only 15.1% (N = 87) of respondents indicated that they would change organisations if they won the lottery. One is left wondering how much of the positive response to these questions is directly related to ownership of businesses as 72.8% (N = 559) of respondents are in top management positions in their organisations (see Table 12 and Figure 5) and might thus be the founders of their businesses. This could explain why they would be reluctant to leave the company if they won the lottery and did not need to work.

Table 24 and Figure 17 illustrate the importance respondents attach to their work.

Table 24: Importance of work (N = 768)

Importance of Work	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Not important at all	3	0,4	3	0,4
Not very important	10	1,3	13	1,7
Neither important nor unimportant	44	5,7	57	7,4
Rather important	337	43,9	394	51,3
Very important	374	48,7	768	100

The overwhelming majority of respondents (i.e. 92.6%, N = 711) indicated that work really matters to them, with almost half of the sample population (i.e. 48.7%, N = 374) indicating that work is very important to them and 43.9% (N = 337) indicating that work is rather important to them. It is assumed that these individuals would invest a lot in their work because it matters so much to them.

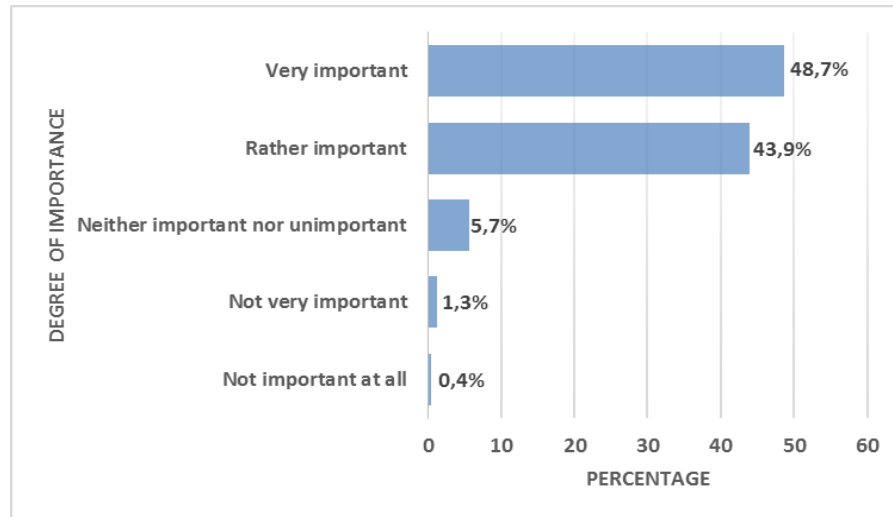


Figure 17: Importance of work

Table 25 and Figure 18 illustrate to what extent respondents see service to others as important.

Table 25: Importance of service to others (N = 768)

Importance of Service to Others	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Not important at all	9	1,2	9	1,2
Not very important	22	2,9	31	4
Neither important nor unimportant	120	15,6	151	19,7
Rather important	348	45,3	499	65
Very important	269	35	768	100

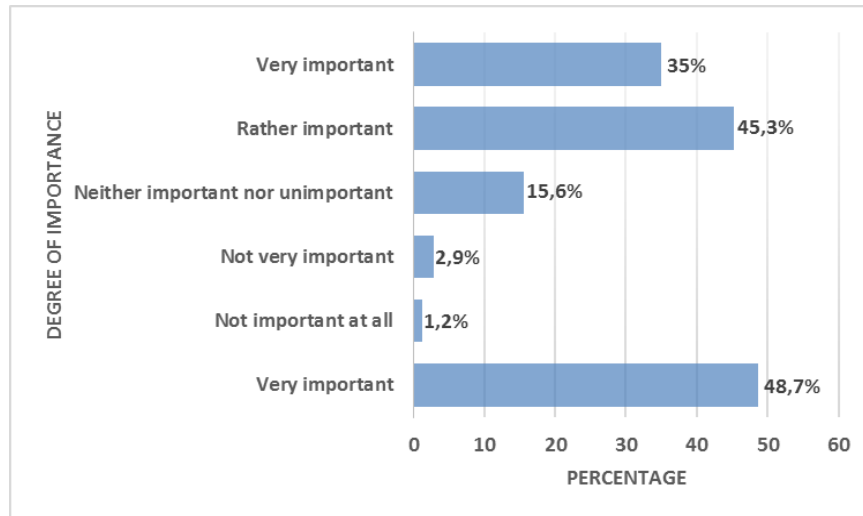


Figure 18: Importance of service to others

The majority of respondents (i.e. 80.3%, N = 617) indicate that service to others is either very important (i.e. 35%, N = 269) or rather important (i.e. 45.3%, N = 348) to them, with a mere 4.1% (N = 31) of respondents indicating that they do not view service to others as important.

Table 26 and Figure 19 illustrate how much respondents value their relationships with co-workers.

Table 26: Importance of relationships with co-workers (N = 768)

Importance of Relationships with Co-Workers	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Not important at all	5	0,7	5	0,7
Not very important	25	3,3	30	3,9
Neither important nor unimportant	106	13,8	136	17,7
Rather important	388	50,5	524	68,2
Very important	244	31,8	768	100

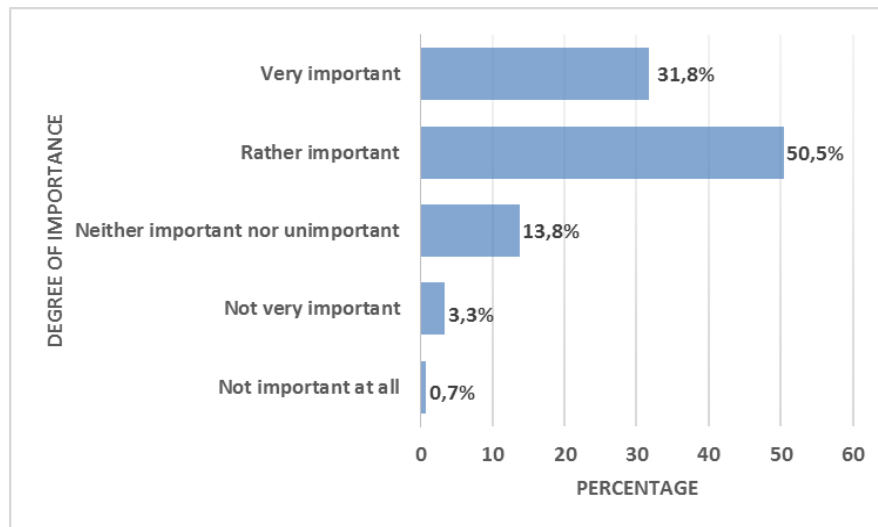


Figure 19: Importance of relationships with co-workers

From Table 26 and Figure 19, it is evident the majority of respondents (i.e. 82.3%, N = 632) view their relationships with their co-workers as important.

Table 27 and Figure 20 illustrate to what extent respondents rank their relationship with their supervisors as important or not.

Table 27: Importance of relationship with supervisor (N = 768)

Importance of Relationship with Supervisor	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Not important at all	18	2,3	18	2,3
Not very important	30	3,9	48	6,3
Neither important nor unimportant	123	16	171	22,3
Rather important	339	44,1	510	66,4
Very important	258	33,6	768	100

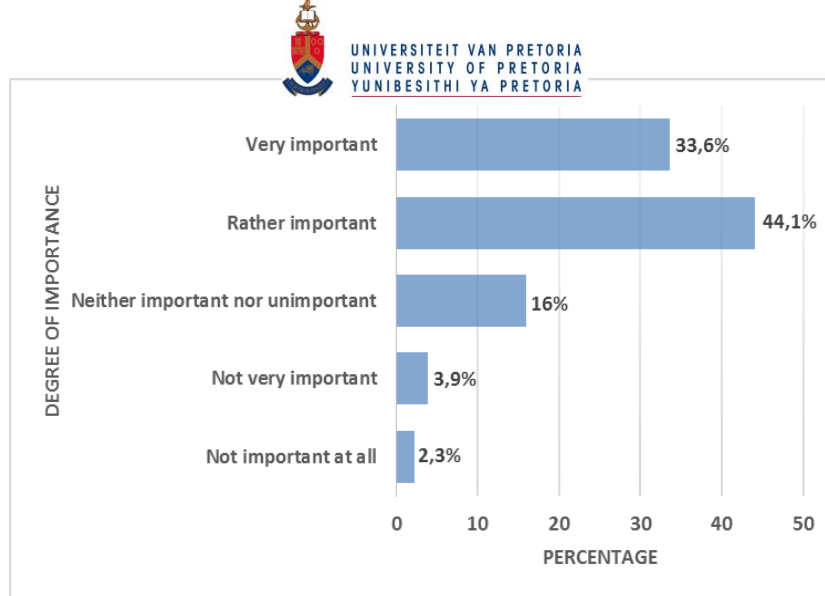


Figure 20: Importance of relationship with supervisor

From Table 27 and Figure 20 it is evident that the majority (i.e. 77.7%, N = 597) of respondents view their relationship with their supervisor as either very important (i.e. 33.6%, N = 258) or rather important (44.1%, N = 339).

Table 28 and Figure 21 illustrate to what extent respondents rank their relationships with their subordinates as important.

Table 28: Importance of relationships with subordinates (N = 768)

Importance of Relationships with Subordinates (if applicable)	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Not important at all	10	1,3	10	1,3
Not very important	10	1,3	20	2,6
Neither important nor unimportant	67	8,7	87	11,3
Rather important	335	43,6	422	54,9
Very important	322	41,9	744	96,9
Missing	24	3,1	768	100

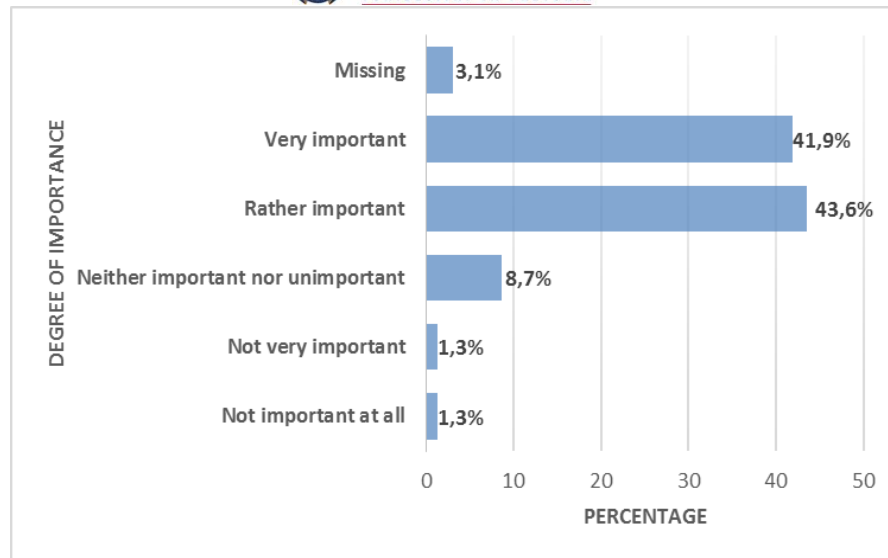


Figure 21: Importance of relationships with subordinates

From Table 28 and Figure 21, it is evident that an overwhelming majority (i.e. 85.5%, N = 657) of respondents value their relationships with subordinates with almost an equal number of respondents indicating that their relationships with their subordinates are either very important (41.9%, N = 322) or rather important (43.6%, N = 335) to them.

Table 29 and Figure 22 illustrate to what extent respondents have good relationships with their co-workers.

Table 29: Quality of relationships with co-workers (N = 768)

Quality of Relationships with Co-Workers	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Very problematic	5	0,7	5	0,7
Somewhat problematic	16	2,1	21	2,7
Neutral/Unsure	120	15,6	141	18,4
Good	481	62,6	622	81
Excellent	146	19	768	100

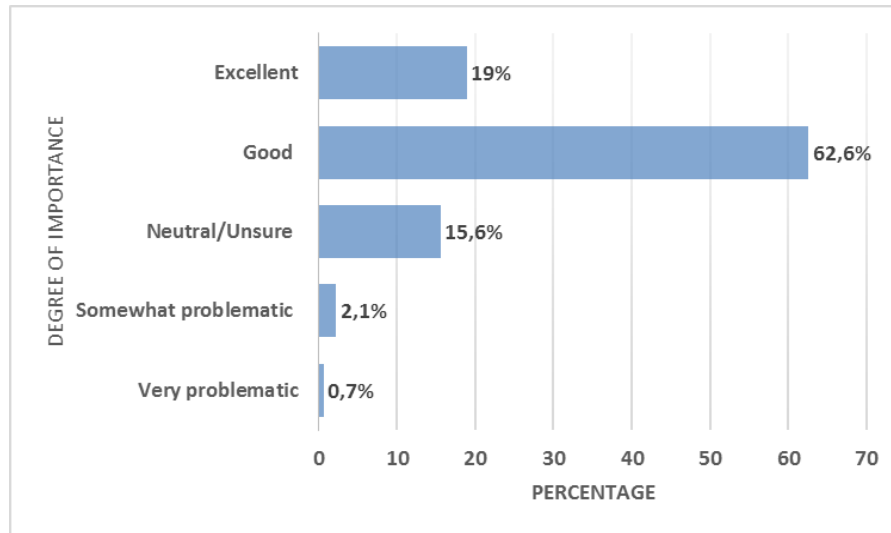


Figure 22: Quality of relationships with co-workers

19% (N = 146) of respondents indicated that they have excellent relationships with their co-workers and 62.6% (N = 481) indicated that they have good relationships with their co-workers. 15.6% (N = 120) of respondents were neutral or unsure as to the quality of the relationships they have with their co-workers and a small percentage (i.e. 2.8%, N = 21) indicated that they had problematic relationships with their co-workers.

Table 30 and Figure 23 illustrate the quality of relationships respondents have with their supervisors.

Table 30: Quality of relationships with supervisor (N = 768)

Quality of Relationship with Supervisor	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Very problematic	19	2,5	19	2,5
Somewhat problematic	25	3,3	44	5,7
Neutral/Unsure	147	19,1	191	24,9
Good	394	51,3	585	76,2
Excellent	183	23,8	768	100

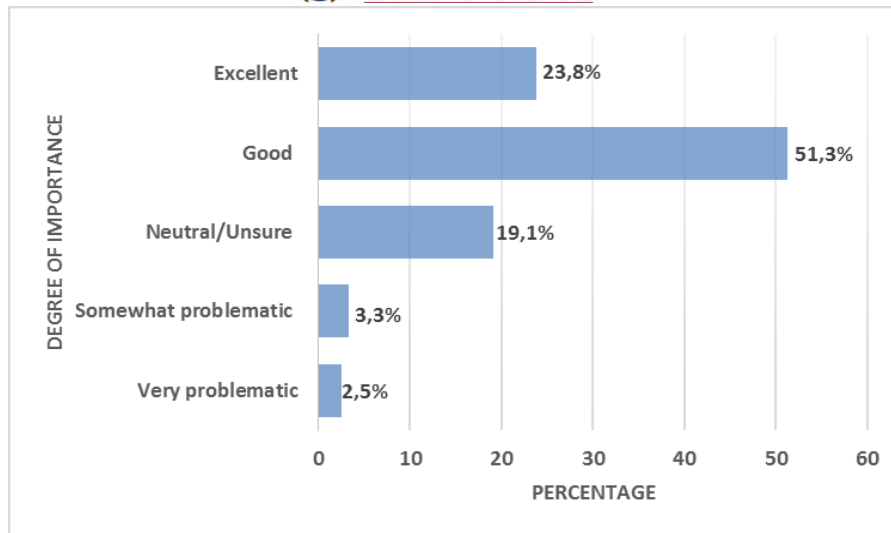


Figure 23: Quality of relationships with supervisor

It could be argued that 75.1% (N = 577) of respondents invest in building good relationships with their supervisors, since 23.8% (N = 183) of respondents indicated that they have an excellent relationship with their supervisor and 51.3% (N = 394) indicated that they have a good relationship with their supervisor.

Table 31 and Figure 24 illustrate the quality of respondents' relationships with their subordinates (where applicable).

Table 31: Quality of relationships with subordinates (N = 768)

Quality of Relationships with Subordinates	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Very problematic	8	1	8	1
Somewhat problematic	18	2,3	26	3,4
Neutral/Unsure	125	16,3	151	19,7
Good	449	58,5	600	78,1
Excellent	145	18,9	745	97
Missing	23	3	768	100

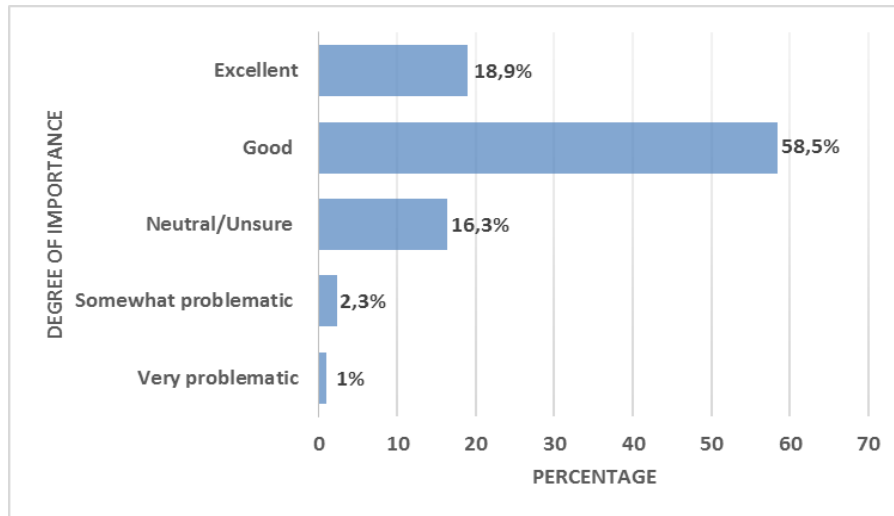


Figure 24: Quality of relationships with subordinates

The majority (i.e. 77.3%, N = 594) of respondents seem to invest time in building strong relationships with their subordinates, since 18.9% (N = 145) of respondents indicated that they have excellent relationships with their subordinates and 58.5% (N = 449) of respondents indicated that they have good relationships with their subordinates.

Table 32 and Figure 25 illustrate how respondents ranked the importance of family in their lives.

Table 32: Importance of family (N = 768)

Importance of Family	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Not important at all	2	0,3	2	0,3
Not very important	2	0,3	4	0,5
Neither important nor unimportant	14	1,8	18	2,3
Rather important	72	9,4	90	11,7
Very important	678	88,3	768	100

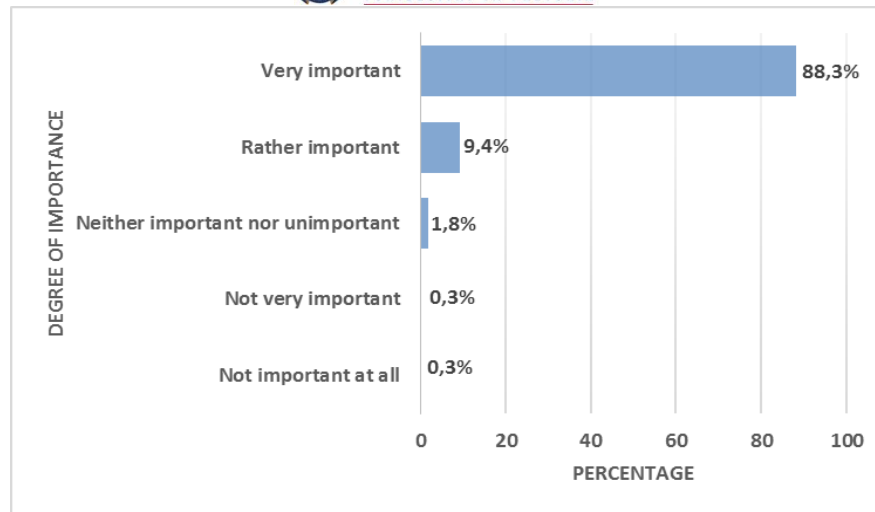


Figure 25: Importance of family

As is evident from Table 32 and Figure 25, a staggering 88.3% (N = 678) of respondents regard their family to be very important. Only a small percentage (i.e. 2.4%, N = 18) do not regard their family to be important.

Table 33 and Figure 26 illustrate how respondents ranked the importance of friends in their lives.

Table 33: Importance of friends (N = 768)

Importance of Friends	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Not important at all	4	0,5	4	0,5
Not very important	17	2,2	21	2,7
Neither important nor unimportant	93	12,1	114	14,8
Rather important	290	37,8	404	52,6
Very important	364	47,4	768	100

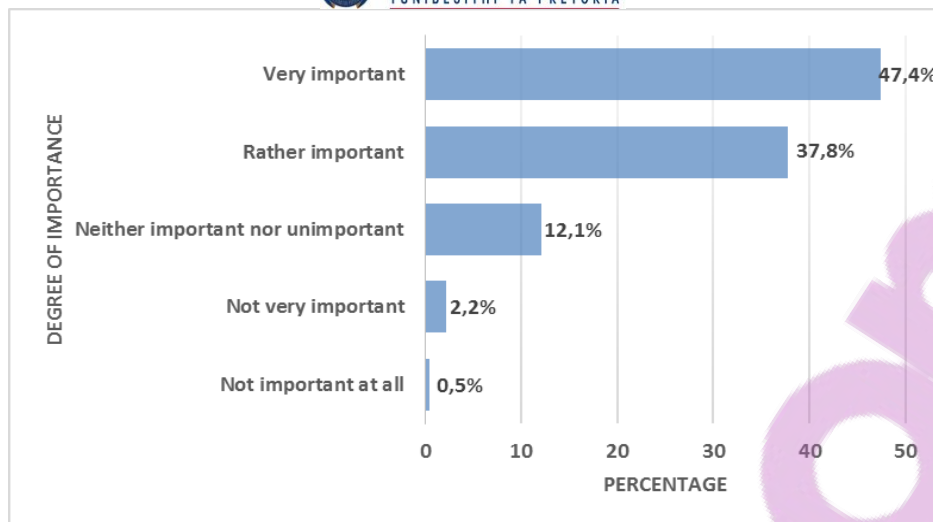


Figure 26: Importance of friends

Table 33 and Figure 26 illustrate that the majority (i.e. 85.2%. N = 654) of respondents value their friendships and feel that their friends are either very important (47.4%, N = 364) or rather important 37.8% (N = 290) to them.

Table 34 and Figure 27 illustrate the quality of relationships respondents have with their families.

Table 34: Quality of relationships with family (N = 768)

Quality of Relationships with Family	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Very problematic	4	0,5	4	0,5
Somewhat problematic	24	3,1	28	3,6
Neutral/Unsure	27	3,5	55	7,2
Good	214	27,9	269	35
Excellent	499	65	768	100

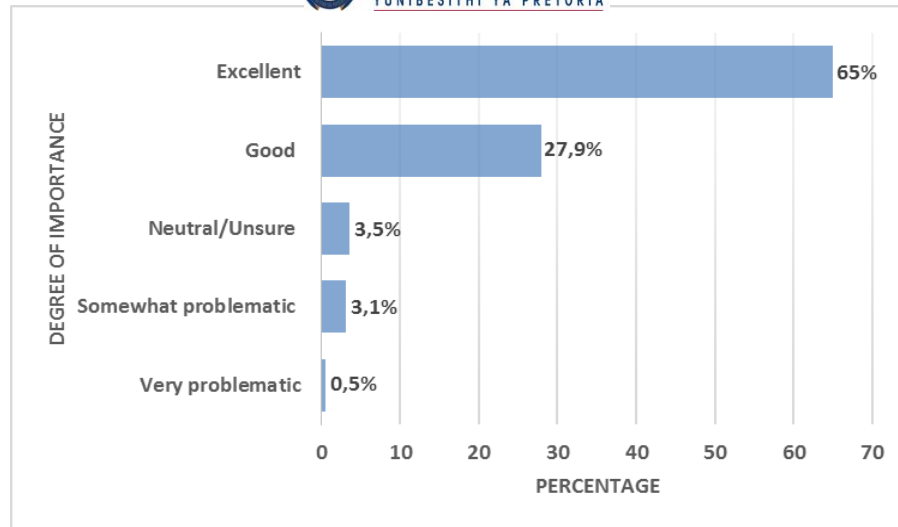


Figure 27: Quality of relationships with family

The overwhelming majority (i.e. 92.8%, N = 713) of respondents seem to invest time in building strong relationships with their families since 65% (N = 499) of respondents indicated that they have excellent relationships with their families and 27.9% (N = 214) of respondents indicated that they have good relationships with their families.

Table 35 and Figure 28 indicate the quality of respondents' relationships with their friends.

Table 35: Quality of relationships with friends (N = 768)

Quality of Relationships with Friends	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Very problematic	2	0,3	2	0,3
Somewhat problematic	6	0,8	8	1
Neutral/Unsure	62	8,1	70	9,1
Good	410	53,4	480	62,5
Excellent	288	37,5	768	100

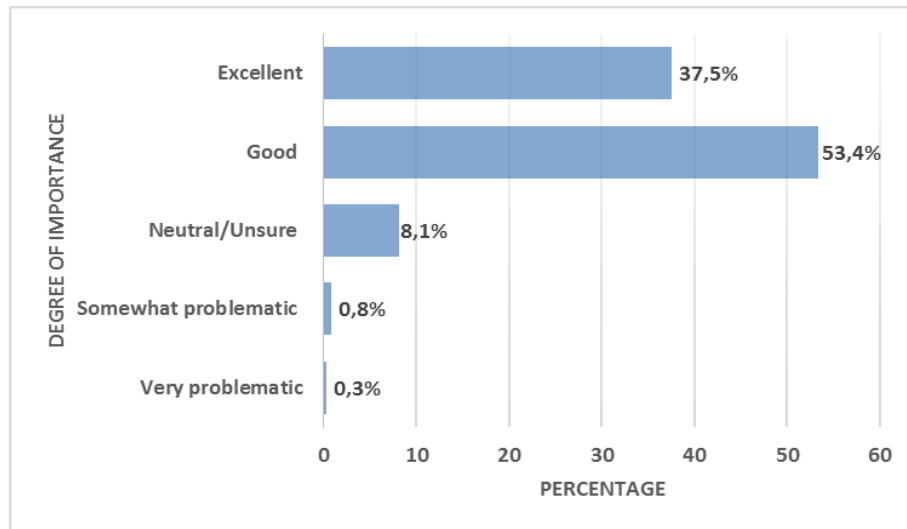


Figure 28: Quality of relationships with friends

Again, it seems that the overwhelming majority (i.e. 90.9%, N = 698) of respondents invest in building strong relationships with their friends, since 37.5% (N = 288) of respondents indicated that they have excellent relationships with their friends and 53.4% (N = 410) indicated that they had good relationships with their friends.

Table 36 and Figure 29, provide a breakdown of respondents' religious orientations.

Table 36: Religious orientations of respondents (N = 768)

Religious Orientation	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Christian	549	71,5	549	71,5
Jewish	22	2,9	571	74,3
Islamic/Muslim	13	1,7	584	76
African traditional	1	0,1	585	76,2
Hindu	16	2,1	601	78,3
Buddhist	5	0,7	606	78,9
Atheist	37	4,8	643	83,7
Pantheist	5	0,7	648	84,4
Agnostic	63	8,2	711	92,6
Other	55	7,2	766	99,7
Missing	2	0,3	768	100

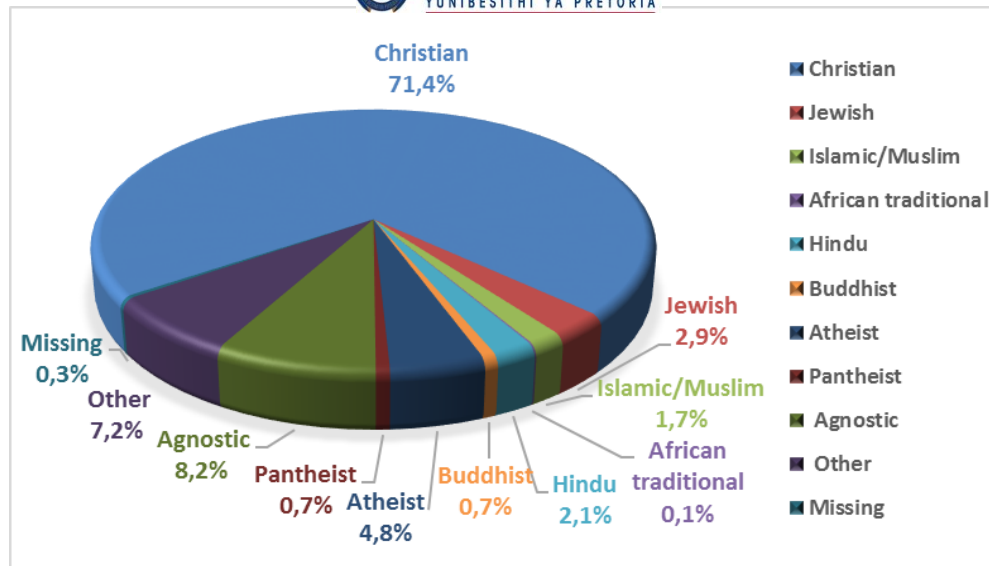


Figure 29: Religious orientations of respondents

The majority of respondents are Christian (i.e. 71.4%, N = 549). This statistic is in line with national statistics which indicate that the overwhelming majority of South Africans, or 79.8%, are Christian (SouthAfrica.info, 2015; South African Government Communication and Information System, 2012).

Table 37 and Figure 30 provide an indication of the strength of respondents' religious convictions.

Table 37: Strength of religious convictions (N = 768)

Strength of Religious Conviction	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Very weak	69	9	69	9
Weak	39	5,1	108	14,1
Moderate	206	26,8	314	40,9
Strong	212	27,6	526	68,5
Very Strong	240	31,3	766	99,7
Missing	2	0,3	768	100

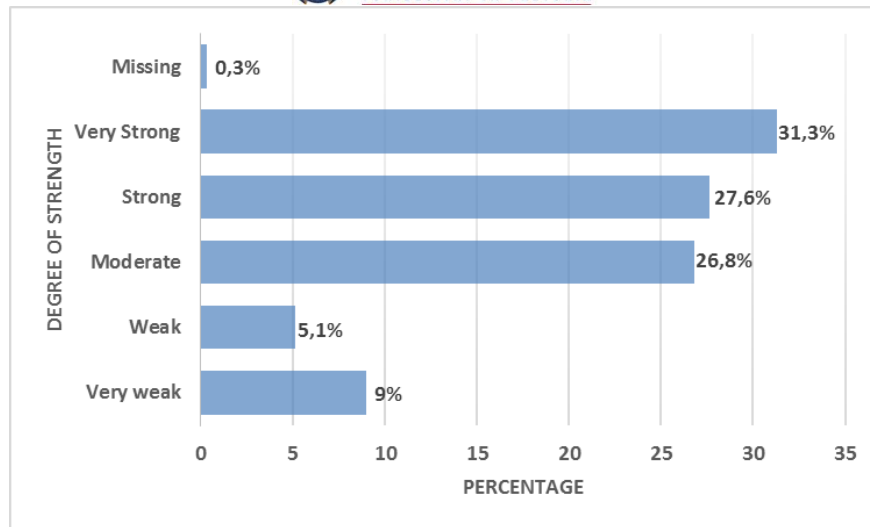


Figure 30: Strength of religious convictions

From Table 37 and Figure 30, it is evident that the majority (i.e. 85.7%, N = 658) of respondents hold strong religious convictions.

Table 38 and Figure 31 illustrate to what extent respondents value religion in their lives.

Table 38: Importance of religion (N = 768)

Importance of Religion	Frequency	Percentage	Cumulative Frequency	Cumulative Percentage
Not important at all	133	17,3	133	17,3
Not very important	68	8,9	201	26,2
Neither important nor unimportant	117	15,2	318	41,4
Rather important	129	16,8	447	58,2
Very important	321	41,8	768	100

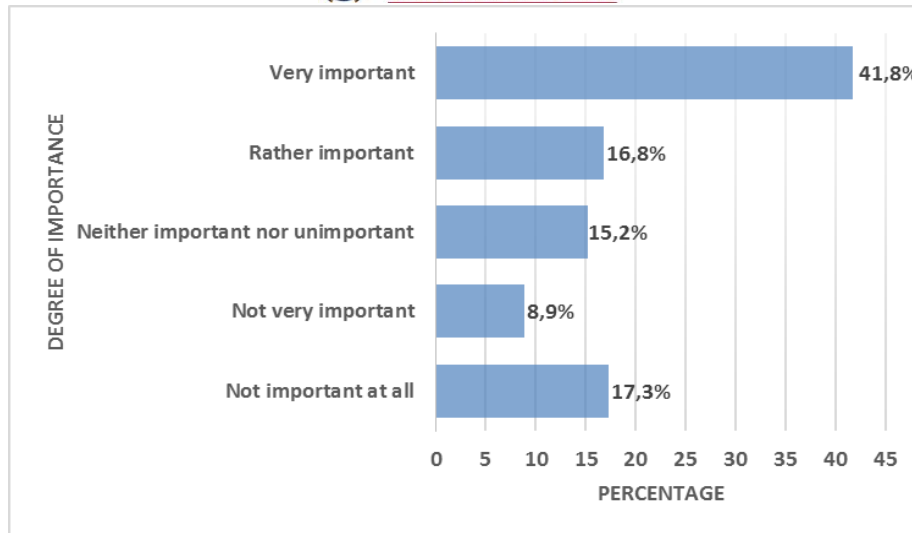


Figure 31: Importance of religion

The majority (i.e. 58.6%, N = 450) of respondents indicated that religion is important to them. 15.2% (N = 117) have neutral feelings about the importance of religion in their lives and 26.2% (N = 201) of respondents indicated that religion is not important to them.

For each of the demographical questions, responses from two respondents are consistently missing. It thus appears as if the same two respondents failed to answer all of these questions.

3.6 ANALYSES OF QUANTITATIVE DATA

Analysis of the quantitative data collected was done in collaboration with the statistical department at the University of Pretoria. The data collected from the first phase of sampling were downloaded into an excel spreadsheet. The data from the second phase of sampling were extracted by iFeedback into an excel spreadsheet and sent to the researcher. The researcher then combined the data sets from the two phases of sampling into one comprehensive excel spreadsheet. The first step was to check the data for completeness. This was done by running data frequencies and determining the frequency of responses as well as the cumulative frequencies and cumulative percentages of responses. Incomplete records – in particular those where the five key measurement instruments (the HSS, OSVS, SAW, UWES and AOCS) were not completed in full were deleted from the spreadsheet as they would yield unreliable results. The data items were pre-coded before the surveys were distributed. This was to ensure ease

of reference and to cater for reverse score items. The data codes proved helpful in sorting the data in the excel spreadsheet. The SAS, SPSS and AMOS statistical packages were used to analyse the data.

3.6.1 Exploratory Factor Analysis (EFA)

In Chapters 1 the researcher questioned whether there was construct redundancy between IS, OS and SAW. In order to determine the level of overlap or independence of these three constructs, the HSS (that measured IS), the OSVS (that measured OS) and the SAW (that measured SAW) were subjected to an exploratory factor analysis (EFA). The EFA was only conducted to determine correlations among the three measurement instruments and not to refine the internal factor structure of the instruments. Once it was confirmed that the three instruments are in fact independent and thus do measure different constructs, each of the instruments were subjected to confirmatory factor analyses (CFA) in order to validate the factor structures and clear the instruments from unnecessary items.

3.6.2 Confirmatory Factor Analyses (CFA)

The assessment of construct validity forms an important part of confirming the adequacy of measurement instruments for measuring the constructs they are intended to measure (Schwab, 1980). Since existing measurement instruments were used for this study and their form and structure were retained as is, it was necessary to carry out confirmatory factor analyses (CFA) to evaluate the latent variables/factors in each of the five measurement instruments used for the survey. The main purpose of the factor analysis was to determine the transferability of the instruments to a South African sample (De Klerk et al., 2009; Van der Walt & De Klerk, 2014a). Although both EFA and CFA are employed to assess construct validity, they are distinctly different statistical analyses.

The goal of EFA is to identify the factors contained in a measurement instrument based on data (Suhr, 2006). For this reason, the researcher is not required to have any specific hypotheses

about how many factors will emerge, and what items or variables these factors will comprise of. Confirmatory factor analysis (CFA) on the other hand, is a theory-testing model as opposed to a theory-generating method like exploratory factor analysis (Stapleton, 1997). It evaluates *a priori* hypotheses and thus requires the researcher to hypothesise, in advance, the number of factors, whether or not these factors are correlated, and which items load onto which factors (Thompson, 2004). Confirmatory factor analyses (CFA) were conducted to assess the goodness of fit of the data to the theoretical models (i.e. the five measuring instruments) and to confirm the results obtained in previous studies.

Based on theory and the findings of other researchers, the HSS and OSVS scales were subjected to a CFA as three-factor models; the SAW scale was subjected to a CFA as a four-factor model; the UWES as a three-factor model and the affective organisational commitment scale as a one-factor model. When reporting the results of a confirmatory factor analysis, one is urged to report: a) the proposed models, b) any modifications made, c) which measures identify each latent variable, d) correlations between latent variables, e) any other pertinent information, such as whether constraints were used (Jackson, Gillaspay & Purc-Stephenson, 2009). Absolute fit indices determine how well the *a priori* model fits, or reproduces the data (McDonald & Ho, 2002).

The first absolute fit index used to test for model fit in this study, was the chi-squared test. Values closer to zero indicate a better fit (Gatignon, 2010; Moss, 2009) although any value < 3 is considered good and a value < 5 is sometimes permissible (Hu & Bentler, 1999). One difficulty with the chi-squared test of model fit is that researchers may fail to reject an inappropriate model in small sample sizes and reject an appropriate model in large sample sizes (Gatignon, 2010). As a result, other measures of fit also need to be reported.

The additional absolute fit indices that were used to determine the best factor model for each measurement instrument, included: root mean square error of approximation (RMSEA), root mean square residual (RMR), goodness of fit index (GFI), adjusted goodness of fit index (AGFI). RMSEA ranges from 0 to 1 with smaller values indicating a better fit. A value of .05 is considered

good fit, values between .06 and .10 are considered acceptable and values $> .10$ are regarded as poor model fit. RMR ranges from 0 to 1 with values of .08 or less considered as acceptable model fit. GFI and AGFI ranges from 0 to 1, with values of .9 or more considered acceptable (Hu & Bentler, 1999).

Relative fit indices were also used to test the models further. Relative fit indices – also called ‘incremental fit indices’ (Tanaka, 1993) or ‘comparative fit indices’ (Bentler, 1990) – compare the chi-squared for the hypothesized model to one from a ‘null’, or ‘baseline’ model (Bentler & Bonnett, 1980; McDonald & Ho, 2002). This null model almost always has a very large chi-square (indicating poor fit) (Hooper et al., 2008). Relative fit indices used in the CFA included the normed fit index (NFI) and comparative fit index (CFI). Values for the NFI should range between 0 and 1, with a cut-off of .95 or greater indicating good model fit (Bentler, 1990). CFI values range from 0 to 1, with larger values indicating better fit. A CFI value of .9 or larger is generally considered to indicate acceptable model fit (Hu & Bentler, 1999).

Items that had a low correlation with a particular factor were omitted and items that showed a high correlation with other items were combined/linked with their respective high correlating counterparts. The CFA was repeated until all the remaining items conformed to this requirement.

3.6.3 Structural Equation Modelling (SEM)

In order to test the fit of models that describe the relationship between IS, OS and SAW, and their individual and combined relationships with WE and OC, the researcher applied *structural equation modelling*. Structural equation modelling (SEM) is a multivariate analysis technique that can examine a series of dependence relationships simultaneously (Hair, Black, Babin & Anderson, 2010). It is known by many other names: covariance structure analysis, latent variable analysis and sometimes it is even identified by the software packages used to conduct the analyses – i.e LISREL or AMOS (Hair, et al., 2010). SEM is used when the researcher wants to examine the correlations among a number of variables to identify possible causal

paths among the variables (Leedy & Omrod, 2010). SEM is comprised of a number of other analysis methods (Hill & Lewicki, 2007) and the nature of each study dictates which methods will be selected for data analysis.

The research models as hypothesised in Chapter 1 were run through SEM. Standardised regression weights were used to measure the relative importance/strength of each of the hypothesised relationships. *Path analysis* was used to provide estimates for each relationship. These estimates are interpreted like regression coefficients. However, the equations are not kept separate. All relationships are computed at the same time. With estimates for each path, an interpretation can be made about each relationship represented in the research model (Leedy & Omrod, 2010).

3.6.4 Analysis of Variance (ANOVA)

Analysis of variance (ANOVA) was used to explore the relationship between IS, OS and SAW with demographic-type variables in order to control for external variance and to establish instances of co-variance. There were 15 demographic variables that could potentially effect the three main constructs measured in this study. Analyses of variance (ANOVA) are used to look for differences among three or more means by comparing the variances both within and across groups of variables (Leedy & Omrod, 2010).

A Fisher's exact or F-test –also sometimes known as Fisher F distribution or the Snecedor-Fisher F distribution (Press, Flannery, Teukolsk & Vetterling, 1994) – was used to score the differences between different demographic groups. The F-test was followed up with a post-hoc pairwise Fisher's least significant difference (LSD) test which compares various pairs of means to identify to what extent specific demographics differed. Post-hoc analyses are usually concerned with finding patterns and/or relationships between subgroups of sampled populations that would otherwise remain undetected and undiscovered. Post-hoc examination reduces errors in reporting false positives from the data (Jaccard, Becker & Wood, 1984).

4 QUALITATIVE PHASE OF THE RESEARCH PROCESS

The quantitative phase of the research was followed by a qualitative phase to gain more insight into people's perceptions, perspectives and experiences on the aspects and variables measured quantitatively. The benefits of implementing a qualitative phase to the research in addition to the initial quantitative phase, was that it was possible to consider different layers to interpreting the research results (Leedy & Omrod, 2010).

The research method used for collecting data during the qualitative phase of the research was semi-structured personal interviews. Interviews are a common means of collecting qualitative data. There are various types of interviews. The most common form of interview is the person-to-person interview (Merriam, 1998). The person-to-person or personal interview allows for better understanding of another's paradigm. It enables the researcher to view the world from the interviewee's subjective perception and to uncover the meaning the interviewees attach to their experiences (Hesse-Biber & Leavy, 2006; Kvale, 1996). Thus, in the words of Patton (1990, p. 278), a personal interview is conducted when the researcher wants to find out what is "*in and on someone's mind*". With a semi-structured interview, although the researcher has a set of predetermined questions, the interviewee can redirect the interview and introduce issues that the researcher had not thought of. In this relationship, the interviewee is considered to be the expert on the subject and should be allowed maximum opportunity to tell his/her story (De Vos, Strydom, Fouché & Delport, 2005).

The qualitative phase of the research mostly depended on lengthy interviews with a carefully selected sample of participants (Creswell, 2007). A limitation to this particular phase of the research process was that not all potential interviewees were willing or available to be interviewed. Some interviewees simply did not have the time for a 45-minute follow-up interview and others may have felt uncomfortable sharing their personal experiences with the researcher.

4.1 INTERVIEW PROCEDURE AND ADMINISTRATION

When data was collected during the quantitative phase of the research, a unique number was allocated to each respondent. This number was used as an identifier that enabled the researcher to find respondents' particular responses in the quantitative data sheet. The identities and contact details of those respondents who disclosed them were captured next to the relevant respondent's unique identifying number in the spreadsheet. The researcher used the contact details the respondents to the survey provided in their responses to contact potential interviewees for follow-up interviews. The researcher compiled an excel spreadsheet with the respondents from the survey with the highest and lowest IS scores. Not all the interviewees that were identified through the scoring of the HSS could be therefore contacted, because they did not all disclose their identities or provide their contact details.

Initially, all the potential interviewees that could be identified, were contacted via e-mail [refer to Appendix E]. In the e-mail the researcher sketched the context and reminded the respondent that they had participated in a survey about their experiences of meaning at work. The reason for the follow-up interview was explained and voluntary participation and confidentiality guaranteed. The researcher then requested that each participant respond by indicating whether they would be open to and available for a follow-up interview. The researcher then followed up her initial e-mail with telephone calls with the potential interviewees. In some instances, a follow-up call was not necessary, because the interviewees responded positively to the researcher's initial e-mail and the correspondence was thus continued over e-mail to arrange a date and time for the interview that would suit the interviewees.

Not all the participants agreed to participate in the interviews. In instances, where there was no response to the researcher's calls or e-mails, it was assumed that not all the interviewees may have received the original e-mail. The researcher therefore followed-up three times with each participant who did not respond to the original invitation— either by telephone or e-mail before concluding that the person was not available to be interviewed.

A semi-structured interview plan with ten open-ended questions [refer to Appendix F] was compiled in preparation for the interviews. The idea was to relate the questions to the spirituality measurement instruments in the survey, but to keep the questions open so that the interviewees had opportunity to tell their stories. For each of the factors measured in each of the three measurement instruments measuring IS, OS and SAW, one open-ended question was prepared that could guide the discussion in a particular direction. However, the nature of semi-structured interviews often leads to the interviewee introducing new elements to the conversation, so the researcher had to ask more questions as the conversation developed to gain deeper insight.

In preparation for the interviews and also to be able to ask deeper questions, the researcher looked at some of the responses that the interviewees gave in the survey. This was done to determine whether certain responses required further probing to establish clarity. The specific responses in the survey the researcher paid attention to was whether a particular interviewee had made a significant career change as well as what their religious views and the strength of their religious views are. Knowing their responses to these questions, the researcher could ask the respondents whether a career change or their religious views play a role in their behaviour and experiences at work. Interviewees then have an opportunity to elaborate on whether or not and how they play a role.

The researcher had to guard against subjectivity whilst interpreting the data obtained during the interviews. The researcher applied *bracketing* to eliminate any personal bias and to avoid asking leading questions during the interviews. Bracketing could be seen as the process of “*cleansing the mind to ready it for the perception of meaning*” (Husserl, 1931, p. 56). It thus implies “*purging all personal assumptions*” (Husserl, 1931, p. 56) before conducting the interviews. Bracketing (also called epoché) can be extremely difficult for a researcher who has also personally experienced the phenomenon under investigation (Leedy & Omrod, 2010). However, it is critical for the researcher to suspend all preconceived notions and personal experiences before conducting the interview if she is to gain a full understanding of how others experience the phenomenon. In other words, if the researcher hypothetically assumes that

non-religious people are more spiritual than religious people, she cannot ask leading questions during the interview that steer a non-religious person towards indicating that they are spiritual or that steer a religious person towards indicating that they are not spiritual as the researcher would then be bringing her own biases into the mix. However, knowing beforehand that someone is religious or not, does not affect objectivity in itself. It all depends on what the researcher does with that knowledge. In this particular case, the researcher used insights into interviewees' religious views and whether they had made career changes to find possible explanations for patterns identified during the quantitative analysis of the data by asking interviewees whether they felt that a change in career or their religious values played a role in their behaviour and experiences at work and in what way. Interviewees then had an opportunity to elaborate on their experiences and their views on the matter.

The researcher kept a self-reflective journal of her own thoughts, feelings and observations during the research process to become more aware of possible potential bias and to be able to reduce it as far as possible in order to ensure trustworthiness of the results. The researcher made a list of the typical answers she expected to hear and then avoided asking leading questions related to those expected answers so that she could listen to the interviewees and their stories.

The researcher personally conducted all of the interviews. All interviews were recorded. At the start of each interview, the researcher briefly explained the purpose of the interview and obtained consent to record the interview and to have the interview transcribed by a third party. The researcher guaranteed confidentiality of information shared during the interviews as only the researcher would be able to connect particular responses to particular individuals. Interviewees were also assured that they could stop the interview at any time or decline to answer questions they felt uncomfortable with. Each interview was labelled with the interviewee's unique identifying number (as allocated to them during the quantitative phase of the research) instead of their name so that their responses could remain confidential even if outside assistance for transcribing was sought.

A challenge researchers are faced with when conducting interviews, is *building rapport* with interviewees (De Vos *et al.*, 2005). The researcher anticipated that building rapport with the interviewees would be difficult due to the nature of the type of questions that she would be asking. The researcher knew she would have to probe interviewees on what gave them personal meaning in life and ask about their religious and spiritual views and how they demonstrate their personal values in their lives and work. For this reason, the researcher started each interview with a casual chat about the personal in general; asking them about themselves or the work they do, before commencing with the research questions. This was done to put interviewees at ease. Interviewees were allowed to ask any questions they wanted answers to before the start of the interview and were also re-assured that they did not have to answer questions they did not feel comfortable answering. However, contrary to what the researcher expected, she did not struggle to build rapport with those interviewees who agreed to be interviewed. The interviewees were all very open and eager to share their views and experiences and the researcher found the experience very rewarding.

At the end of each interview, the researcher asked interviewees whether they had any questions relating to the research. Most interviewees were interested to know more about the research and why the researcher had embarked on the study. This resulted in an informal conversation about the research after the interview had been concluded. Interviewees were not informed that the study was a study of spirituality, but merely that it was about understanding the value of meaningful work.

Of the 13 interviews that were conducted, nine interviews were conducted face-to-face at a place selected by the participants, e.g., either the participants' place of work or at a coffee shop in an area where they lived or worked. Three interviews were conducted telephonically through teleconference so that the interviews could still be recorded and one was conducted through Skype.

Once completed, the researcher transcribed all interviews herself. Each digital recording was saved using the interviewees' unique identifying number that was allocated to them during the

quantitative phase of the research. No individual names, company names or contact details were mentioned during the recordings so that it was not possible to know the identities of the interviewees. The benefits of the researcher doing the transcriptions herself, are that it provides an opportunity to listen to the interviews again and it means that the researcher specifically knows the nuances that were at play during the interviews and that might not be so evident from the recordings. The researcher also determines the speed at which the transcriptions are thus completed. The drawbacks of self-transcription are that it is very time-consuming and the researcher runs the risk of falling into interpretation mode whilst transcribing and thus errors could slip in. The transcriptions were checked for correctness by reading the transcriptions whilst replaying the recordings.

The researcher uploaded the transcribed documents into an NVivo data file for analysis. NVivo is a qualitative data analysis computer software package that allows for code-based theory building. The software enables the researcher to assign codes to different sections of transcribed text and generate theoretical models or networks from the codes. NVivo is developed by QSR International, a qualitative research software developer in Melbourne Australia. NVivo allows for open coding where initial codes can be assigned to data. These data can be transcribed into text or can still be in audio or video format. Once initial codes or 'nodes' have been created, these codes or nodes can be grouped together in 'code families' or 'collections'. Hierarchical or semantic links can then be created in order to create structure or describe relationships between code families or concepts. The researcher can then map the code families to derive new theories (Lewins & Silver, 2007).

The interview transcriptions of respondents with high IS were assigned a separate classification to the interview transcriptions of respondents with low IS. This was done so that responses of high IS participants could be compared to responses of low IS participants. The audio file recordings were also saved as back-ups on NVivo.

Computer Assisted Qualitative Data Analysis Software (CAQDAS) is the application of qualitative data analysis software in qualitative research (Atlas.ti, 2016). The advantages of

using CAQDAS include having a better overview of data, easier coding and recoding of data, enhanced exactness of data, improved organisation of collected research material and a more professional work output (Rodik & Primorac, 2015).

The CAQDAS package NVivo was specifically selected to analyse the qualitative data because of its coding, aggregation, query and visualisation capabilities and because the software is more user-friendly than other CAQDAS packages like Atlas.ti and MAXQDA. NVivo allows for text searches, ideas to be linked, data to be coded and searched, and models to be drawn while always being able to instantly access the original data behind the concepts (Bringer, Johnston & Brackenridge, 2006). It also allows the researcher to save the audio files in their original format. The researcher's own limited knowledge and experience in the use of other packages such as Atlas.ti, MAXQDA etc. as well as limited funding for software licences played a role in the selection of the software to be used for data analysis in this study.

Specific obstacles faced in using CAQDAS, include the fact that most of the packages are not user-friendly and therefore require a huge investment in learning time afforded in trying to understand how to use the software effectively. Some aspects of user-unfriendliness – e.g. clumsiness of some outputs, the need to find a workaround to get a specific analytic query, the need to supplement the work with paper-and-pencil/word-processor have also been mentioned by other researchers (Rodik & Primorac, 2015). The second most prominent obstacle faced by researchers who use CAQDAS is the amount of learning time needed in order to grapple with specific software. The use of these types of software result in a phenomenon called “learning-by-use” (Castells, 1996, p.31) which is a typical feature of contemporary technology, as opposed to the “learn-then-use approach”, typical for older, less interactive technologies such as television. These unexpected moments of required learning have the effect of slowing down analysis and dragging out the data analysis phase.

4.2 QUALITATIVE SAMPLE DESCRIPTION

The sample of interviewees was selected from the original survey sample. The researcher was cognisant of the fact that the interviewees selected would not be representative of the working population of South Africa as the original sample was skewed towards the Caucasian demographic. However, the interviewees selected for the follow-up interviewees were selected because they were unique. They were the individuals with the highest and lowest IS scores from the original survey group. A description of the interviewees is provided in Table 39. Limited demographic information is provided however in order to protect their identities.

Table 39: Description of Interviewees (N = 13)

High IS Respondents										
ID	Region in SA	Level in Org	Gender	Ethnicity	Age	Marital status	Highest Qual	Career change	Religion	Interview duration
26	JhB	Middle	M	White	30-39	Married	Diploma	No	Non-religious	50 min
183	Pretoria	Top	M	White	50-59	Married	Master's	Yes	Christian	30 min
251	Cape Town	Middle	F	White	30-39	Married	Honours	Yes	Jewish	30 min
313	JhB	Top	F	Coloured	40-49	Co-habiting	Honours	Yes	Agnostic	40 min
395	Durban	Top	M	White	55	Married	Master's	No	Atheist	30 min
550	Cape Town	Top	M	White	60+	Married	Matric	Yes	Christian	45 min
645	JhB	Top	M	White	50-59	Married	Master's	Yes	Christian	50 min
Low to Moderate IS Respondents										
ID	Region in SA	Level in Org	Gender	Ethnicity	Age	Marital status	Highest Qual	Career change	Religion	Interview duration
66	JhB	Middle	F	White	30-39	Married	Master's	No	Christian	32 min
201	Cape Town	Top	M	White	60+	Married	Master's	Yes	Atheist	60 min
259	Pretoria	Top	F	White	40-49	Married	Master's	No	Christian	30 min
441	JhB	Top	M	White	60+	Married	Honours	No	Atheist	30 min
681	JhB	Top	M	White	40-49	Married	Master's	No	Christian	42 min
750	JhB	Top	M	White	50-59	Married	Bachelors	No	Atheist	50 min

4.3 ANALYSIS OF QUALITATIVE DATA

Qualitative data analysis is a continuous process that happens while the data is being collected (Marshall and Rossman, 2006). *Inductive* reasoning is required to analyse qualitative data. This involves drawing conclusions from patterns observed in the data collected and sometimes even during the data collection process. During the qualitative phase therefore, a subjective and interpretive approach is adopted. The interpretive view assumes that social phenomena – in this case individual and organisational spirituality – are “*created from perceptions and the consequent actions of the social actors*” (Saunders *et.al.*, 2009, p. 111). In other words, reality is subjective and depends on the individual interpretation of a particular individual. Thus, the subjective experiences of the participants to the research become important as well as the meaning they derive from the social interactions they have with others. The challenge for the researcher therefore is to enter the social world of the research participants and try to understand the world from their point of view (Saunders *et.al.*, 2009, p. 116).

Creswell (2007) as well as Leedy and Omrod (2010) discuss the steps to follow in analysing phenomenological data obtained from interviews:

- *Step 1:* Identify statements that relate to the topic. Here the researcher needs to sift the relevant information from the irrelevant information provided during the interviews and then break all the relevant information into segments or categories that reflect a single thought or phrase.
- *Step 2:* Group statements into ‘meaning’ units. The researcher groups the different statements or thoughts into categories that reflect various dimensions of the phenomenon.
- *Step 3:* Seek divergent perspectives. During this step, the researcher investigates the various ways in which different people experience the phenomenon differently.
- *Step 4:* Construct a composite. The researcher derives an overall description of the phenomenon from the different meanings and descriptions identified and categorised.

The researcher practically applied these four steps in analysing the qualitative data for this study. All the responses to the interview questions were analysed in order to identify statements

that relate to the research questions posed in this study. The researcher had to sift through all the data to identify only the relevant information that provide possible insights or answers to the research questions. The qualitative data analysis therefore commenced with a process of open coding in NVivo which involved applying preliminary codes to the data. All the relevant statements were grouped into categories called ‘meaning units’. The researcher also had to identify any divergent perspectives that present an opposite view to the ideas reflected in the ‘meaning units’. The process of open coding was followed by a process of axial coding. In axial coding, the initial codes or ‘meaning units’ are grouped into ‘families’ or ‘categories’. The researcher then derived overall descriptions of the phenomena described in the interviews and how they relate to each of the research questions posed in this study. This was done through selective coding where meaningful relationships are assigned to different code ‘families’. Finally, themes are derived that provide possible answers to the research questions posed in Chapter 1.

5 TRUSTWORTHINESS, QUALITY AND RIGOUR IN RESEARCH

One of the primary methodological challenges facing the researcher in this study is the reconciliation of the two divergent research philosophies underpinned in quantitative and qualitative research respectively. Creswell *et.al.* (2007) emphasises that it is important to ensure that results are consistent even when they are obtained on different occasions or by different forms of data collection. However, replication in qualitative research is not possible since “*human nature is never static*” (Merriam, 1998, p. 205). So in order to be taken seriously by the scientific community, the researcher has to ensure that the results or phenomena that are discovered through the data collection methods used are congruent with reality (Creswell *et.al.*, 2007, p. 37).

Validity of the quantitative results to the study, was increased in the following ways:

- 1) A pilot study of the measurement instrument was conducted to ensure internal validity.

- 2) Confirmatory Factor Analyses as part of the main quantitative data analyses assisted the researcher in establishing construct and discriminant validity for all the measurement instruments used in this study (Creswell *et.al.*, 2007).
- 3) Both CFA and SEM are strong statistical methods to validate research results.
- 4) Furthermore, by applying ANOVA to the data as well to control for external variance, the impact of demographical variables on the relationships between IS, OS and SAW were considered so that incorrect conclusions were not drawn from the results of the SEM.

According to Guba and Lincoln (2005) the concept of reliability within a quantitative research paradigm can be replaced with the concepts of credibility, transferability, dependability and confirmability, which taken as a whole constitute trustworthiness in qualitative research. This requires a rigorous process of verification (Morse, Barrett, Mayan, Olson & Spiers, 2002). According to Morse et al. (2002), verification strategies include:

- 1) Ensuring that the research question matches the research method
- 2) Selecting an appropriate sample of participants who have direct knowledge of the phenomenon under investigation
- 3) Collecting and analysing data concurrently
- 4) Thinking theoretically by verifying new data with data already collected

Validity of the qualitative results to the study, was increased in the following ways:

- 1) Interviewees were selected using the quantitative results of the HSS instrument. By selecting interviewees on extreme IS scores, discriminant validity was improved in the qualitative phase of the study as it was not necessary to make conclusions about individuals' level of spirituality. This reduced bias and subjectivity during the interview process.
- 2) The researcher conducted all the interviews herself, thereby reducing external error.
- 3) The researcher applied bracketing through journaling her own thoughts and ideas around the topic to reduce her bias in interpreting interview responses.
- 4) The researcher tried to remain objective by only asking open-ended questions during the interviews.

- 5) Qualitative data analysis software was used to identify key themes from the data. This ensured a more rigorous approach to analysing the data.
- 6) The qualitative findings were compared with the quantitative findings derived from the first phase of the research. Literature was consulted to determine if the factors that emerged during data analyses had also emerged in other studies. This is *theory triangulation* (Leedy & Ormrod, 2001, p. 105).
- 7) For purposes of external validity, Creswell *et.al.* (2007, p. 37) suggests using very rich descriptions of the participants to the study. Providing rich descriptions of the participants will also enhance the meaning of explanations offered later about the individual and organisational factors that determine the direction of the relationship between IS, OS and SAW.
- 8) Results obtained from the survey were triangulated with results obtained through the personal interviews to ensure consistency in the data reported.

CHAPTER 4

QUANTITATIVE RESULTS

“Organizations that are values-based and values-driven are better able to engage the hearts and the minds of their people” (Pfeffer, 2010, p. 27)

The purpose of Chapter 4, is to discuss the findings from the quantitative phase of the research. This chapter reports on the results from the EFA, CFA, SEM and ANOVA statistical analyses conducted during the quantitative phase of the research.

1 RESULTS OF EXPLORATORY FACTOR ANALYSIS

Due to conceptual similarities between the definitions of the constructs IS, OS and SAW as well as some similar questions in each of the measurement instruments, it was necessary to run an exploratory factor analysis (EFA) in order to ascertain whether these measurement instruments all measure distinct constructs and to ensure that there is no construct redundancy. The relationship between the three variables IS, OS and SAW is represented in Figure 32 below.

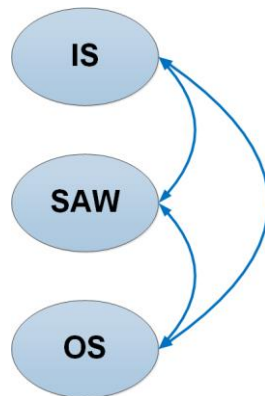


Figure 32: Relationship between IS, OS and SAW

The EFA was therefore conducted to determine whether there are any correlations among the three measurement instruments (and consequently the three independent variables being

measured) and not to refine the internal factor structure of the instruments. This was done through principle axis factoring (PAF). Table 40 and the Scree Plot in Figure 33 indicate the eigen values derived from the PAF.

Table 40: Eigen values of the PAF (20 highest values only)

Factor	Initial eigenvalues		
	Total	% of Variance	Cumulative %
1	19.392	33.4	33.4
2	4.746	8.2	41.6
3	3.317	5.7	47.3
4	1.912	3.3	50.6
5	1.727	3.0	53.6
6	1.403	2.4	56.0
7	1.197	2.1	58.1
8	1.120	1.9	60.0
9	1.059	1.8	61.8
10	1.007	1.7	63.6
11	.951	1.6	65.2
12	.872	1.5	66.7
13	.864	1.5	68.2
14	.825	1.4	69.6
15	.819	1.4	71.1
16	.764	1.3	72.4
17	.754	1.3	73.7
18	.692	1.2	74.9
19	.656	1.1	76.0
20	.648	1.1	77.1

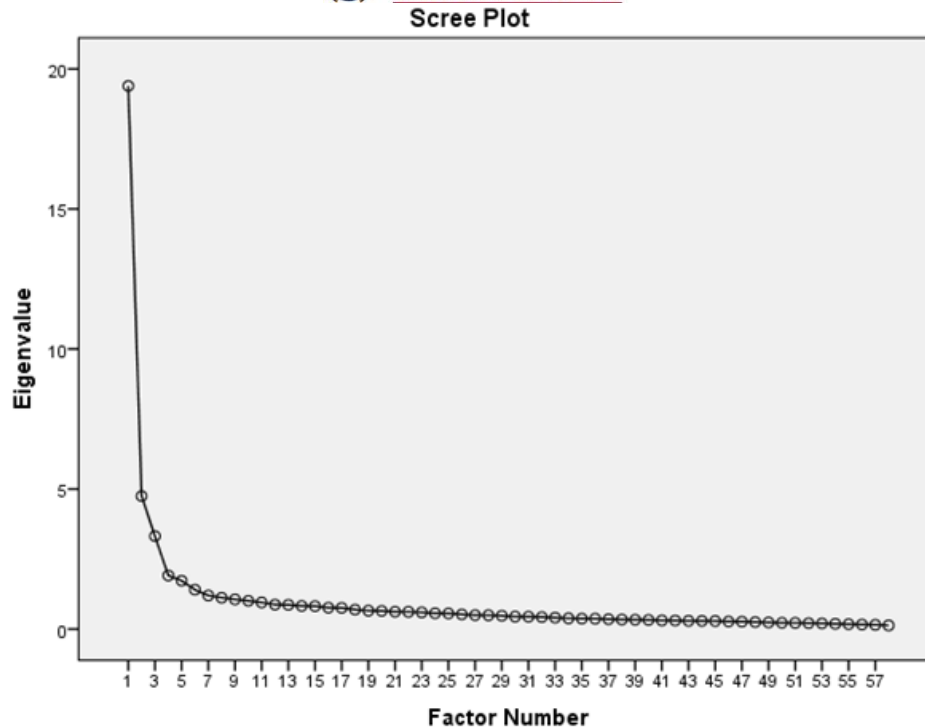


Figure 33: Scree Plot of the PAF

Table 40 and the scree plot in Figure 33 indicate 10 factors with eigen values above 1. Three factors (highlighted in yellow) clearly account for most of the variance in the model with much larger eigen values than the remaining seven factors with values above 1. The first three factors in the table thus point to three primary factors. The next step was to determine the correlation between these three primary factors. If little correlation is found among the three factors, it can be assumed that the three factors represent three independent variables.

An oblique rotation of the axes was done to determine the correlations between the factors through an oblimin with kaiser normalisation. Table 41 illustrates the pattern matrix generated from the oblimin rotation with kaiser normalisation. The factor 1 column in Table 41 represents the construct OS. The factor 2 column in Table 41 represents the construct IS and the factor 3 column in Table 41 represents the construct SAW. It was therefore expected that all items from the OSVS (coded 'B') would have a higher loading in column 1 which represents OS. Furthermore, it was expected that all items from the HSS (coded 'A') would have a higher loading in column 2 which represents IS. Lastly, it was expected that all items from the SAW instrument (coded 'C') would have a higher loading in column 3.

Table 41: Pattern matrix from oblimin rotation with kaiser normalisation

	Factor		
	1 (OS)	2 (IS)	3 (SAW)
B4	.870	-.064	.006
B9	.825	.037	-.022
B5	.795	-.144	.017
B8	.783	.199	.076
B20	.777	-.095	.008
B14	.773	-.014	-.002
B11	.758	.155	.056
B19	.756	-.217	.008
B15	.724	.088	-.082
B10	.716	.102	-.120
B12	.714	.089	-.006
B17	.700	.035	.051
B18	.660	.077	-.191
B6	.634	.112	-.138
B7	.633	.224	.018
B2	.580	.182	-.067
C3	.539	-.078	-.255
B1	.537	.244	-.055
B3	.531	.164	-.158
C1	.488	-.079	-.367
C17	.472	-.035	-.405
B16	.456	.024	-.094
C13	.451	.010	-.420
B13	.352	.049	-.014
A8	.077	.644	.183
A7	.043	.608	.017
A6	.025	.572	-.030
A4	.003	.572	-.056
A12	.097	.556	.135
A18	-.072	.527	-.242
A11	.119	.526	.103
A10	-.030	.522	-.172
A2	-.026	.520	-.041

	Factor		
	1 (OS)	2 (IS)	3 (SAW)
A14	.066	.492	.034
A1	-.046	.484	-.032
A15	-.079	.479	-.157
A3	-.063	.444	-.272
A5	.022	.408	-.069
A19	.057	.371	.012
A20	.074	.369	-.147
A16	.036	.322	-.016
A17	.109	.297	.038
A13	-.014	.177	.034
C8	.052	.012	-.766
C9	.097	-.006	-.746
C11	.048	.159	-.729
C16	.085	.043	-.708
C5	.204	-.098	-.694
C7	.081	-.050	-.678
C14	.188	.002	-.640
C2	.188	-.122	-.624
C4	.308	-.071	-.603
C18	.312	-.153	-.589
C15	-.069	.322	-.556
C6	.104	.251	-.537
C12	-.059	.045	-.467
C10	-.033	.358	-.446
A9	.049	.287	-.295

The basic rule in interpreting the pattern matrix from an oblique rotation is that cross loadings $< .32$ are considered very low (Costello & Osborne, 2005). A 'cross-loading' item is an item that loads at .32 or higher on two or more factors. Tabachnick and Fidell (2001) consider .32 as a good rule of thumb for the minimum loading of an item. A loading of .50 indicates a strong correlation with the factor (Costello & Osborne, 2005). Item communalities are considered 'high' if they range between .7 and .8 or greater (Velicer and Fava, 1998). Potential overlaps or cross-loads between factors are highlighted in yellow.

All of the B-coded items had loadings above .5 and in some instances above .7 in column one of the table; indicating a strong relationship with OS (as was expected). Most of the A-coded items had loadings above .32 – and in some instances above .4 – in column 2 of the table; indicating a strong relationship with IS (as was expected). Only item A9 (highlighted in yellow) had a cross-loading > .32 on columns 3, indicating a strong relationship with SAW as well. Most of the C-coded items had loadings above .4 – and in some instances above .7 – in column three of the table; indicating a strong relationship with SAW (as was expected). There were only four exceptions (highlighted in yellow): Item C3 had a loading of .255 for SAW and a loading of .539 on OS; indicating that this item may measure OS more than it does SAW. Item C1 loaded .367 on SAW and .488 on OS; indicating an acceptable loading onto SAW, but a stronger correlation with OS. Items C17 and C13 cross-loaded on both SAW and OS, indicating a strong relationship to both constructs. Notwithstanding the few cross-loadings, most items clearly correlated with their respective factors (instruments). The three factors obtained therefore closely represent the three constructs measured.

The correlation matrix in Table 42 shows the inter-correlation between the three instruments.

Table 42: Factor correlation matrix

Factor	1 (OS)	2 (IS)	3 (SAW)
1 (OS)	1.000		
2 (IS)	.309	1.000	
3 (SAW)	-.533	-.310	1.000

The inter-correlation of instruments through PFA revealed relative low correlations between the three factors (OS, IS and SAW). Two of the inter-correlations are < .32, with only three inter-correlation loadings between the OSVS and the SAW instruments > .32, but still < .6. One can therefore argue that the HSS, OSVS and SAW measurement instruments largely measure independent constructs and that IS, OS and SAW are three distinctly different constructs.

2 RESULTS OF CONFIRMATORY FACTOR ANALYSES

2.1 THE HUMAN SPIRITUALITY SCALE (HSS)

In developing the HSS, Wheat's (1991) data showed three strong factors, namely a sense of meaning and purpose in life, awareness of life, and compassion. The PFA run in Van der Walt and De Klerk's (2014a) study for a South African sample however, supported construct and measurement validity of a 19-item *one-factor solution* for the HSS. To account for the variances found in Van der Walt and De Klerk's (2014) study, the CFA that was run on the HSS in this study, tested it as both a three-factor and a one-factor model to determine which model fit best with the data.

Responses to the HSS were first subjected to a three-factor CFA according to the three-factor model proposed by Wheat (1991) as indicated in Figure 34.

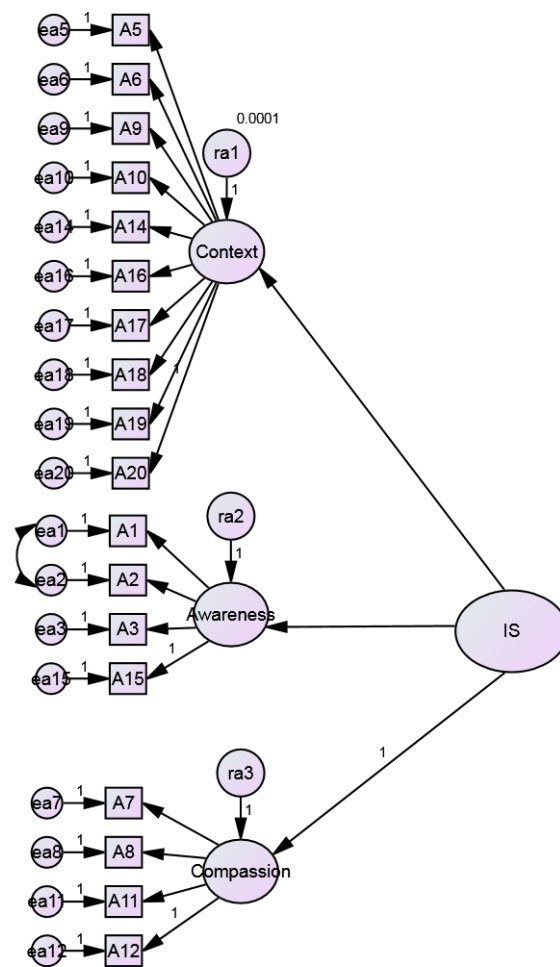


Figure 34: HSS three-factor model diagram

As indicated by Figure 34, the HSS (and consequently the variable individual spirituality (IS)) consists of three factors: (1) larger context (Context), (2) awareness of life (Awareness) and (3) Compassion. Larger context is measured through ten items, awareness of life through four items and compassion through four items.

The CFA revealed three factors with eigen values > 1 , of which one showed an eigen value of 4.4 and the next two factors showed eigen values of only 1.5 and 1.2., indicating a three factor model. However, it also indicates the strong possibility of a one-factor model due to the large difference between the largest and second largest eigen values. A chi-square of 1113.1 (degrees of freedom (df) = 167, $p < .0001$), was obtained from the CFA. The high ratio of chi-

square to df, e.g., $1113.1/167 = 6.7$, is indicative that the data does not have a good fit with this three-factor model of the HSS. A chi-square value closer to zero indicate a better fit (Gatignon, 2010; Moss, 2009) although any value < 3 is considered good and a value < 5 is sometimes permissible (Hu & Bentler, 1999). Table 43 provides the standardised regression weights for each item of three-factor CFA Model 1. 'F' in the table refers to 'Factor' – there are three factors – and 'IS' is the construct being measured. The standardised regression weights indicate which items load onto which factor in the HSS. Items with regression weights < 3 are highlighted in yellow.

Table 43: Standardised regression weights for three-factor CFA Model 1 for HSS (N = 768)

	Estimate
F1 <--- IS	.940
F2 <--- IS	.801
F3 <--- IS	.857
A3 <--- F2	.574
A1 <--- F2	.584
A20 <--- F1	.514
A19 <--- F1	.416
A18 <--- F1	.625
A17 <--- F1	.340
A16 <--- F1	.368
A14 <--- F1	.514
A10 <--- F1	.624
A9 <--- F1	.447
A6 <--- F1	.623
A5 <--- F1	.472
A11 <--- F3	.565
A8 <--- F3	.725
A15 <--- F2	.538
A2 <--- F2	.639
A13 <--- F3	.195
A12 <--- F3	.634

	Estimate
A7 <--- F3	.676
A4 <--- F3	.540

From the standardised regression weights for this three-factor CFA of the HSS, the only item that shows a regression weight < .3 (i.e., .195), is item A13. Table 44 provides a breakdown of the modification indices (M.I.) for the regression weights of the three-factor CFA Model 1 for HSS. For ease of readability Table 44 is split into three columns. Column two follows on column one and column three follows on column 2. Items with a high co-variance are highlighted in yellow.

Table 44: Modification indices for three-factor CFA Model 1 for HSS (N = 768)

	M.I.	Par Change		M.I.	Par Change		M.I.	Par Change
A13 <--- A7	8.602	-.115	A2 <--- A15	19.260	-.113	A14 <--- A20	7.268	.083
A13 <--- A4	5.282	.088	A2 <--- A11	10.431	.122	A14 <--- A1	13.640	-.084
A13 <--- A2	9.702	.106	A2 <--- A14	8.565	-.105	A16 <--- A15	4.667	.068
A13 <--- A11	6.819	.110	A2 <--- A19	5.646	-.088	A16 <--- A11	10.571	-.150
A13 <--- A1	6.265	.072	A2 <--- A1	52.003	.185	A16 <--- A6	7.119	.105
A13 <--- A3	4.681	-.068	A2 <--- A3	6.901	-.074	A16 <--- A10	6.278	-.130
A12 <--- FA2	5.234	-.105	A8 <--- FA2	11.517	-.138	A17 <--- A12	5.949	.078
A12 <--- A4	10.079	-.090	A8 <--- A12	6.401	.067	A17 <--- A7	4.908	.070
A12 <--- A2	5.894	-.061	A8 <--- A7	23.872	.126	A17 <--- A9	18.575	-.129
A12 <--- A8	4.649	.067	A8 <--- A4	17.076	-.104	A17 <--- A14	16.607	.131
A12 <--- A14	8.685	.088	A8 <--- A15	7.135	-.051	A17 <--- A3	4.294	-.052
A12 <--- A17	4.696	.069	A8 <--- A2	6.573	-.058	A18 <--- A12	15.921	-.132
A12 <--- A18	11.749	-.091	A8 <--- A9	5.515	-.058	A18 <--- A15	14.922	.092
A12 <--- A19	6.346	.077	A8 <--- A14	8.233	.076	A18 <--- A8	12.571	-.123
A12 <--- A3	12.681	-.083	A8 <--- A18	13.268	-.086	A18 <--- A10	10.122	.125
A7 <--- A13	17.716	-.110	A8 <--- A1	8.828	-.056	A18 <--- A14	6.208	-.083
A7 <--- A4	31.098	-.157	A8 <--- A3	20.326	-.093	A18 <--- A3	33.898	.151
A7 <--- A2	21.911	-.117	A11 <--- A13	10.420	.085	A19 <--- A12	6.148	.081
A7 <--- A8	19.740	.137	A11 <--- A7	16.856	-.119	A19 <--- A2	4.184	-.057
A7 <--- A11	22.719	-.147	A11 <--- A4	35.547	.168	A19 <--- A5	27.584	.241

A7 <--- A6	8.042	.075	A11 <--- A2	11.909	.087	A19 <--- A9	7.378	-.082
A7 <--- A14	8.044	.084	A11 <--- A10	7.361	.095	A20 <--- A14	7.264	.090
A7 <--- A17	6.433	.080	A11 <--- A14	5.000	-.066	A20 <--- A16	4.842	-.057
A7 <--- A1	9.438	-.065	A11 <--- A16	11.567	-.078	A20 <--- A17	4.093	.072
A4 <--- IS	8.053	.551	A11 <--- A1	5.648	.050	A20 <--- A1	7.722	-.066
A4 <--- FA1	6.167	.168	A5 <--- A19	29.736	.130	A1 <--- FA1	4.607	-.192
A4 <--- FA2	62.226	.401	A6 <--- A7	7.269	.088	A1 <--- A13	6.248	.097
A4 <--- A13	7.666	.081	A6 <--- A16	10.918	.085	A1 <--- A7	7.915	-.121
A4 <--- A12	8.087	-.094	A6 <--- A17	5.993	-.087	A1 <--- A4	19.681	.186
A4 <--- A7	21.914	-.151	A9 <--- A17	20.946	-.173	A1 <--- A15	4.311	-.066
A4 <--- A2	154.327	.349	A9 <--- A19	7.680	-.101	A1 <--- A2	44.478	.249
A4 <--- A8	9.950	-.109	A9 <--- A3	10.936	.092	A1 <--- A9	4.489	-.086
A4 <--- A11	33.763	.202	A10 <--- A11	8.342	.077	A1 <--- A10	5.409	-.120
A4 <--- A9	9.492	.095	A10 <--- A9	4.027	.047	A1 <--- A14	18.543	-.189
A4 <--- A18	4.804	.065	A10 <--- A14	7.527	-.070	A1 <--- A20	11.470	-.143
A4 <--- A1	74.540	.204	A10 <--- A16	9.655	-.061	A1 <--- A3	7.862	-.096
A4 <--- A3	42.257	.168	A10 <--- A18	10.089	.072	A3 <--- A13	10.931	-.118
A15 <--- A2	14.819	-.146	A14 <--- FA3	4.492	.338	A3 <--- A12	5.670	-.096
A15 <--- A14	10.180	.143	A14 <--- A12	17.340	.133	A3 <--- A4	6.876	.101
A15 <--- A16	8.240	.099	A14 <--- A7	10.745	.102	A3 <--- A15	16.992	.119
A15 <--- A18	14.484	.152	A14 <--- A2	8.223	-.078	A3 <--- A2	5.764	-.082
A15 <--- A3	15.654	.138	A14 <--- A8	16.898	.137	A3 <--- A8	5.636	-.100
A2 <--- A13	14.480	.121	A14 <--- A10	5.954	-.092	A3 <--- A9	16.060	.150
A2 <--- A7	12.126	-.122	A14 <--- A17	20.754	.155	A3 <--- A18	31.967	.204
A2 <--- A4	91.915	.328	A14 <--- A18	4.894	-.063	A3 <--- A1	7.678	-.080

From the modification indices (M.I.) of each item for this model, it became apparent that item A4 shows a high co-variance with item A2. Furthermore, items A1 and A2 also shows high co-variance; indicating that these two items may be interpreted in the same way and thus in effect may measure the same thing.

Table 45 provides a summary of the key fit indices for three-factor CFA Model 1 for HSS.

Table 45: Fit Indices for three-factor CFA Model 1 for HSS (N = 768)

Absolute Fit Indices	
RMSEA	.086
RMR	.056
GFI	.855
AGFI	.818
Relative Fit Indices	
NFI	.737
CFI	.766

Although the fit indices approach the acceptable range of fit, the CFA for the three-factor model of the HSS indicates that the data do not have a good fit with this model (Model 1).

From this result it was decided to run a second CFA model. However, this time item A4 was omitted from the model (Model 2). The ratio of chi-square to df, e.g., $749/149 = 5.0$ is much better, but still indicative that the data does not have a good fit with this three factor model of the HSS. In addition, the standardised regression weights for three-factor CFA Model 2 for HSS, indicates that item A13 shows a little weaker regression weight of .164. Modification indices for three-factor CFA Model 2 also indicates an increase in the co-variance between items A1 and A2. Table 46 provides a comparison of fit indices between three-factor CFA Model 1 and Model 2 of the HSS.

Table 46: Comparison of fit indices for three-factor CFA Models 1 and 2 for HSS (N = 768)

Fit Indices	CFA Model 1	CFA Model 2
Absolute Fit Indices		
RMSEA	.086	.073
RMR	.056	.048
GFI	.855	.896
AGFI	.818	.868
Relative Fit Indices		
NFI	.737	.797
CFI	.766	.830

In comparison with Model 1, all the indices in Model 2 show substantive improvement indicating a better fit of the data for the model, with an RMR of .048 indicating an excellent model fit of the data with the model. Nevertheless, the RMSEA of Model 2 is still somewhat high at .073 and the GFI, AGFI, CFI and NFI still somewhat lower than preferred. It was therefore necessary to run a third three-factor CFA Model for HSS.

Item A4 was omitted again and exogenous variable ra1 was set for Model 3. In the first two CFA models the variance of exogenous variable ra1 was negative; a so-called Heywood case. Setting ra1 to a small positive value, 0.0001, is a suggested solution to this problem (Dillon, Kumar & Mulani, 1987). For Model 3, a chi-square of 749.6 was obtained. The chi-square to df ratio $749.6/150 = 5.0$ shows little improvement from Model 2. The standardised regression weights of item A13 remains low at .165. Modification indices for Model 3 continue to indicate a co-variance between items A1 and A2. Table 47 provides a comparison of fit indices between three-factor CFA Model 1, 2 and 3 for HSS.

Table 47: Comparison of fit indices for three-factor CFA Models 1, 2 and 3 for HSS (N = 768)

Fit Indices	CFA Model 1	CFA Model 2	CFA Model 3
Absolute Fit Indices			
RMSEA	.086	.073	.072
RMR	.056	.048	.048
GFI	.855	.896	.896
AGFI	.818	.868	.868
Relative Fit Indices			
NFI	.737	.797	.797
CFI	.766	.830	.830

From the very small changes in the fit indices, it is clear that the setting of an unobserved exogenous item ra1 does not make much of a difference to the fit indices for Model 3. The only change is a slight improvement in the RMSEA.

A fourth three-factor CFA model for HSS was run (Model 4); omitting both items A4 and A13 as well as setting exogenous item ra1 again. The chi-square to df ratio of $697.4/133 = 5.2$ shows a slight digression. Modification indices for Model 4 continue to show a co-variance between items A1 and A2. Table 48 provides a comparison of fit indices between three-factor CFA Models 1 to 4 for HSS.

Table 48: Comparison of fit indices for three-factor CFA Models 1, 2, 3 and 4 for HSS (N = 768)

Fit Indices	CFA Model 1	CFA Model 2	CFA Model 3	CFA Model 4
Absolute Fit Indices				
RMSEA	.086	.073	.072	.074
RMR	.056	.048	.048	.048
GFI	.855	.896	.896	.900
AGFI	.818	.868	.868	.871
Relative Fit Indices				
NFI	.737	.797	.797	.808
CFI	.766	.830	.830	.838

Three-factor CFA Model 4 for HSS generally shows better fit indices, with GFI reaching .9 which is considered a good fit and AGFI, NFI and CFI also improving slightly. However, RMSEA digressed very slightly.

A three-factor CFA for HSS was run for the fifth time (Model 5), this time with items A4 and A13 omitted, exogenous variable ra1 set and items A1 and A2 linked/combined because of their co-variance in the previous four models. For Model 5, the chi-square to df ratio of $564.5/132 = 4.3$ shows a substantial improvement. Table 49 provides a comparison of fit indices between three-factor CFA Models 1 to 5 for HSS.

Table 49: Comparison of fit indices for three-factor CFA Models 1, 2, 3, 4 and 5 for HSS (N = 768)

Fit Indices	CFA Model 1	CFA Model 2	CFA Model 3	CFA Model 4	CFA Model 5
Absolute Fit Indices					
RMSEA	.086	.073	.072	.074	.065
RMR	.056	.048	.048	.048	.040
GFI	.855	.896	.896	.900	.919
AGFI	.818	.868	.868	.871	.895
Relative Fit Indices					
NFI	.737	.797	.797	.808	.844
CFI	.766	.830	.830	.838	.876

From Table 49, it seems that the co-variance between items A1 and A2 account for most of the challenges faced with model fit as the fit indices for Model 5 improved substantially. The RMSEA improves much by reducing to .065, which could be considered as acceptable. RMR improves further by reducing to .040. GFI improves to above .9 indicating a good model fit, with AGFI increasing to almost .9 at .895. The relative fit indices also increase to .844 for NFI and .876 for CFI. Although these indices are still a little below .9, they are very close and one can conclude that for Model 5, the data shows an acceptable fit to the model.

The fact that the eigen values for the CFA points to one-factor that was much stronger than the other two factors, raises the possibility of the HSS being a one-factor instrument. In addition, Van der Walt and De Klerk (2014a) raised concerns about the HSS being a one or three factor instrument. To account for these aspects, it was also decided to run a one-factor CFA on the HSS in order to determine whether a one-factor model would present a better fit than the three factor model.

The first one-factor CFA was run without any modifications. For this model, a chi-square to df ratio of $1291.1/170 = 7.6$ ($p < .0001$) is obtained; indicating that the data do not have a good fit with the model. Table 50 provides the standardised regression weights for each item of one-

factor CFA Model 1 for HSS. All the items represent one factor – IS. Regression weights < .3 are highlighted in yellow.

Table 50: Standardised regression weights for one-factor CFA Model 1 for HSS (N = 768)

	Estimate
A5 <--- IS	.456
A6 <--- IS	.606
A9 <--- IS	.428
A10 <--- IS	.594
A14 <--- IS	.503
A16 <--- IS	.346
A17 <--- IS	.325
A18 <--- IS	.589
A19 <--- IS	.393
A20 <--- IS	.473
A1 <--- IS	.453
A2 <--- IS	.536
A3 <--- IS	.514
A15 <--- IS	.489
A4 <--- IS	.595
A7 <--- IS	.609
A8 <--- IS	.610
A11 <--- IS	.535
A12 <--- IS	.545
rA13 <--- IS	.183

The standardised regression weights table (Table 50) for the one-factor CFA Model 1 for HSS, indicate that item A13 has a weak regression weight at .183. Table 51 provides a breakdown of the modification indices (M.I.) for the regression weights of the one-factor CFA Model 1 for HSS. For ease of readability Table 51 is split into three columns. Column two follows on column one and column three follows on column 2. Items with a high co-variance are highlighted in yellow.

Table 51: Modification indices for one-factor CFA Model 1 for HSS (N = 768)

	M.I.	Par Change		M.I.	Par Change		M.I.	Par Change
rA13 <--- A11	8.666	.124	A4 <--- rA13	7.625	.077	A9 <--- A18	6.126	.079
rA13 <--- A7	5.535	-.093	A4 <--- A12	5.512	-.074	A9 <--- A19	4.752	-.080
rA13 <--- A4	4.770	.084	A4 <--- A11	31.193	.185	A9 <--- A20	4.354	.071
rA13 <--- A3	7.093	-.084	A4 <--- A8	5.230	-.075	A10 <--- A1	4.603	-.039
rA13 <--- A2	7.967	.096	A4 <--- A7	23.233	-.149	A10 <--- A9	7.759	.066
rA13 <--- A1	4.921	.064	A4 <--- A3	11.542	.084	A10 <--- A16	4.450	-.042
A12 <--- A11	7.762	.091	A4 <--- A2	106.347	.276	A10 <--- A18	19.721	.102
A12 <--- A8	38.854	.203	A4 <--- A1	43.999	.149	A14 <--- A12	11.272	.107
A12 <--- A7	17.993	.129	A4 <--- A14	6.521	-.081	A14 <--- A11	4.683	-.072
A12 <--- A4	4.985	-.066	A4 <--- A17	6.790	-.088	A14 <--- A8	10.720	.109
A12 <--- A3	18.390	-.104	A4 <--- A20	4.091	-.061	A14 <--- A7	7.318	.084
A12 <--- A2	5.538	-.062	A15 <--- A8	6.603	-.120	A14 <--- A4	5.482	-.071
A12 <--- A9	4.089	-.059	A15 <--- A3	30.922	.195	A14 <--- A2	15.181	-.105
A12 <--- A14	12.127	.109	A15 <--- A16	4.951	.077	A14 <--- A1	21.056	-.104
A12 <--- A17	5.802	.080	A15 <--- A18	9.954	.127	A14 <--- A17	23.539	.165
A12 <--- A18	17.128	-.116	A3 <--- rA13	9.704	-.112	A14 <--- A20	12.354	.107
A12 <--- A19	5.473	.075	A3 <--- A12	17.405	-.169	A16 <--- rA13	4.026	-.078
A11 <--- rA13	12.303	.092	A3 <--- A8	18.787	-.184	A16 <--- A11	13.909	-.173
A11 <--- A12	7.623	.082	A3 <--- A4	9.879	.122	A16 <--- A15	4.185	.065
A11 <--- A7	4.287	-.060	A3 <--- A15	32.160	.165	A16 <--- A6	10.334	.128
A11 <--- A4	27.706	.150	A3 <--- A9	10.090	.120	A17 <--- A12	4.384	.067
A11 <--- A2	5.087	.057	A3 <--- A17	6.277	-.108	A17 <--- A7	4.065	.064
A11 <--- A14	4.948	-.066	A3 <--- A18	23.972	.178	A17 <--- A4	4.640	-.066
A11 <--- A16	17.761	-.097	A2 <--- rA13	11.329	.110	A17 <--- A3	5.011	-.056
A11 <--- A18	6.132	-.066	A2 <--- A12	5.447	-.086	A17 <--- A2	4.372	-.057
A8 <--- A12	44.394	.189	A2 <--- A11	5.095	.087	A17 <--- A9	15.153	-.117
A8 <--- A11	4.161	.061	A2 <--- A7	20.983	-.165	A17 <--- A14	19.131	.141
A8 <--- A7	68.258	.230	A2 <--- A4	94.612	.342	A17 <--- A20	5.804	.075
A8 <--- A4	5.404	-.063	A2 <--- A1	110.742	.277	A18 <--- A12	18.681	-.145
A8 <--- A15	8.291	-.059	A2 <--- A14	16.066	-.148	A18 <--- A11	6.810	-.092
A8 <--- A3	22.681	-.106	A2 <--- A17	5.692	-.094	A18 <--- A8	15.151	-.137
A8 <--- A2	4.170	-.049	A2 <--- A19	8.307	-.109	A18 <--- A15	11.931	.084

A8 <--- A1	6.566	-.052	A1 <--- rA13	6.153	.101	A18 <--- A3	27.624	.138
A8 <--- A9	6.175	-.066	A1 <--- A8	4.971	-.107	A18 <--- A9	7.971	.088
A8 <--- A14	13.177	.103	A1 <--- A7	9.564	-.139	A18 <--- A10	19.495	.175
A8 <--- A18	15.873	-.101	A1 <--- A4	34.420	.257	A18 <--- A16	5.250	.060
A7 <--- rA13	9.137	-.081	A1 <--- A2	97.378	.384	A18 <--- A20	5.605	.077
A7 <--- A12	20.550	.138	A1 <--- A14	19.594	-.203	A19 <--- A12	4.410	.069
A7 <--- A11	4.986	-.071	A1 <--- A20	9.868	-.138	A19 <--- A2	6.805	-.072
A7 <--- A8	68.229	.263	A5 <--- A19	34.685	.140	A19 <--- A5	32.162	.262
A7 <--- A4	23.997	-.142	A6 <--- A16	15.211	.100	A19 <--- A9	4.569	-.065
A7 <--- A2	24.362	-.127	A9 <--- A8	4.530	-.079	A20 <--- A1	10.145	-.077
A7 <--- A1	12.628	-.077	A9 <--- A3	8.936	.083	A20 <--- A9	4.620	.067
A7 <--- A9	4.757	-.062	A9 <--- A10	5.895	.102	A20 <--- A14	11.819	.116
A7 <--- A14	8.991	.091	A9 <--- A16	4.159	.056	A20 <--- A17	6.833	.094
A7 <--- A17	6.146	.080	A9 <--- A17	16.811	-.156	A20 <--- A18	4.570	.065

From the Modification Indices (M.I.), it is again apparent that items A1 and A2 and items A2 and A4 co-vary. However, this time co-variances are also found between items A7 and A8. Table 52 provides a summary of the key fit indices for one-factor CFA Model 1 for HSS.

Table 52: Fit Indices for one-factor CFA Model 1 for HSS (N = 768)

Absolute Fit Indices	
RMSEA	.093
RMR	.057
GFI	.830
AGFI	.790
Relative Fit Indices	
NFI	.695
CFI	.723

For the one-factor CFA Model 1, the RMR is very good at .057, indicating a good fit of the data with the model. However, the RMSEA is too high at .093 and the GFI, AGFI, NFI and CFI are a bit low at .830, .790, .695 and .723 respectively.

It was therefore decided to run a second one-factor CFA model, combining items A2 and A4. For Model 2, a chi-square to df ratio of $1118.5/160 = 7.0$ is obtained. Although the ratio improves, it is still a bit high. Standardised regression weights for one-factor CFA Model 2, indicates that item A13 still has a weak regression weight at .171. Modification indices indicates an increase in the co-variance between items A1 and A2 and between items A7 and A8. Table 53 provides a comparison of fit indices between one-factor CFA Model 1 and Model 2 for HSS.

Table 53: Comparison of fit indices for one-factor CFA Models 1 and 2 for HSS (N = 768)

Fit Indices	CFA Model 1	CFA Model 2
Absolute Fit Indices		
RMSEA	.093	.086
RMR	.057	.056
GFI	.830	.857
AGFI	.790	.822
Relative Fit Indices		
NFI	.695	.736
CFI	.723	.766

For the one-factor CFA Model 2, all the fit indices show improvement. However, the RMSEA and RMR are still a bit high at .086. The GFI, AGFI, CFI and NFI are all moving closer to .9, but are somewhat low. It was therefore necessary to run a third one-factor CFA Model for HSS, again combining items A2 and A4, but also combining items A1 and A2. For Model 3, the chi-square to df ratio of $1009.0/168 = 6$ shows improvement, but is a bit high. Standardised regression weights for one-factor CFA Model 3 for HSS, indicates that item A13 still has a weak loading at .169. Modification indices continue to show a high co-variance between items A7 and A8. Table 54 provides a comparison of fit indices between one-factor CFA Models 1, 2 and 3.

Table 54: Comparison of fit indices for one-factor CFA Models 1, 2 and 3 for HSS (N = 768)

Fit Indices	CFA Model 1	CFA Model 2	CFA Model 3
Absolute Fit Indices			
RMSEA	.093	.086	.081
RMR	.057	.056	.050
GFI	.830	.857	.867
AGFI	.790	.822	.834
Relative Fit Indices			
NFI	.695	.736	.762
CFI	.723	.766	.792

The one-factor CFA Model 3 shows improvement in the fit of the data with the model on most of the indices. The RMSEA is still high at .081 and thus indicates that the data do not have a good fit with the model. The RMR of .050 indicates a very good fit with the data. However, the RMSEA is still a bit high and both the GFI and the AGFI are still a bit low. With regards to the relative fit indices, both the CFI and NFI regressed somewhat.

It was therefore decided to run a fourth one-factor CFA Model for HSS, again combining items A2 and A4 and items A1 and A2, but also combining items A7 and A8 (Model 4). For Model 4, the chi-square to df ratio of $898.0/167 = 5.4$ shows much improvement but still points to a model in which the data do not show a very good fit with the model. Standardised regression weights for one-factor CFA Model 4 for HSS, indicate that item A13 still has a weak loading at .171. Table 55 provides a comparison of fit indices between one-factor CFA Models 1 to 4 for HSS.

Table 55: Comparison of fit indices for one-factor CFA Models 1, 2, 3 and 4 for HSS (N= 768)

Fit Indices	CFA Model 1	CFA Model 2	CFA Model 3	CFA Model 4
Absolute Fit Indices				
RMSEA	.093	.086	.081	.076
RMR	.057	.056	.050	.048
GFI	.830	.857	.867	.882
AGFI	.790	.822	.834	.851

Relative Fit Indices				
NFI	.695	.736	.762	.788
CFI	.723	.766	.792	.819

All the indices improve for the one-factor Model 4 for HSS. The RMSEA moves much closer to .06 and RMR moves to below .05, indicating an excellent fit between the data with the model. Although the GFI, AGFI, NFI and CFI indices move closer to .9, they are still a bit low. A fifth one-factor CFA model (Model 5) was run, again with items A2 and A4 combined, items A1 and A2 combined, items A7 and A8 combined and this time item A13 was omitted. For Model 5, the chi-square to df ratio of $846.5/149 = 5.7$ points to a less than ideal model fit. Table 56 provides a comparison of fit indices between one-factor CFA Models 1 to 5 for HSS.

Table 56: Comparison of fit indices for one-factor CFA Models 1, 2, 3, 4 and 5 for HSS (N = 768)

Fit Indices	CFA Model 1	CFA Model 2	CFA Model 3	CFA Model 4	CFA Model 5
Absolute Fit Indices					
RMSEA	.093	.086	.081	.076	.078
RMR	.057	.056	.050	.048	.048
GFI	.830	.857	.867	.882	.884
AGFI	.790	.822	.834	.851	.852
Relative Fit Indices					
NFI	.695	.736	.762	.788	.797
CFI	.723	.766	.792	.819	.826

Although there is an improvement in most of the fit indices, the improvements are small. Further analyses were therefore halted and three-factor CFA Model 5 was compared to one-factor CFA Model 5 to determine which model represents the best fit. Table 57 provides a comparison of the fit indices of three-factor CFA Model 5 and one-factor CFA Model 5.

Table 57: Comparison of fit indices between three-factor CFA Model 5 and one-factor CFA Model 5 (N = 768)

Fit Indices	Three-factor CFA Model 5	One-factor CFA Model 5
Absolute Fit Indices		
RMSEA	.065	.078
RMR	.040	.048
GFI	.919	.884
AGFI	.895	.852
Relative Fit Indices		
NFI	.844	.797
CFI	.876	.826

A comparison of three-factor CFA Model 5 and one-factor CFA Model 5 (Table 57), reveals that the three-factor solution indicates better fit of the data with the model on all of the indices. The RMR and GFI indices are within the prescribed ranges and all the other indices closely approach the prescribed acceptable ranges. As such, it is concluded that for the sample in this study, the HSS represent a three-factor instrument rather than a one-factor instrument. Although not all the indices are within the prescribed ranges, the data still show a close fit to the model; one can ascribe it to a less than ideal sample size (Iacobucci, 2010; Iacobucci & Churchill, 2009). Notwithstanding, one can accept that the three-factor model of the HSS, with items removed or linked as describe earlier, is a statistically sound and practical instrument to measure IS for this sample.

2.2 THE ORGANISATIONAL SPIRITUAL VALUES SCALE (OSVS)

The Organisational Spiritual Values Scale (OSVS) was developed by Kolodinsky et al. (2008) as a three-factor instrument. To account for the differences found in the Kolodinsky et.al. (2008) and Van der Walt and De Klerk's (2014) studies, the CFA that was run on the OSVS in this study, tested it as both a three-factor and a one-factor model to determine which model fit best. Responses to the OSVS were first subjected to a three-factor CFA according to the three-factor model proposed by Kolodinsky et al. (2008) and as indicated in Figure 35.

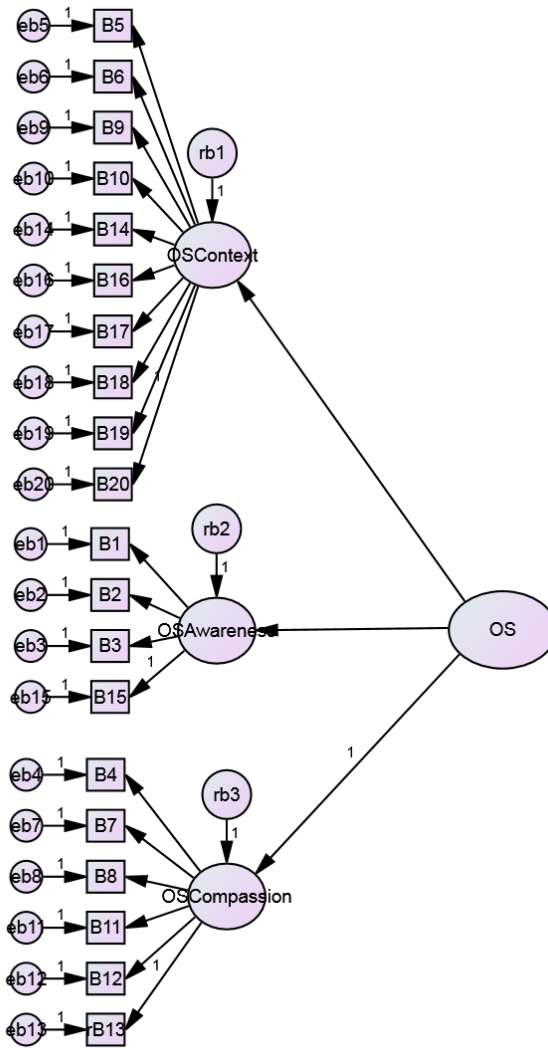


Figure 35: OSVS three-factor model diagram

As indicated by Figure 35, the OSVS (and consequently the variable organisational spirituality (OS)) consists of three factors: (1) larger context (Context), (2) awareness of life (Awareness) and (3) Compassion. The OSVS thus is a mirror of the HSS, adapted to the organisational context. Larger context is measured through ten items, awareness of life through four items and compassion through four items.

The CFA revealed three factors with eigen values > 1 , of which one showed an eigen value of 12.9 and the next two factors showed eigen values of only 1.4 and 1.2., indicating a strong possibility of a one-factor model. A chi-square of 1596.8 ($df = 167$, $p < .0001$), was obtained from the CFA; the high ratio of chi-square to df , e.g., $1596.8/167 = 9.6$, is indicative that the data do

not have a good fit with this three-factor model of the OSVS. Table 58 provides the standardised regression weights for each item of three-factor CFA Model 1 for OSVS. 'F' in the table refers to 'Factor' – there are three factors – and 'OS' is the construct being measured. The standardised regression weights indicate which items load onto which factor in the OSVS. Items with regression weights < .3 highlighted in yellow.

Table 58: Standardised regression weights for three-factor CFA Model 1 for OSVS (N = 768)

	Estimate
F1 <--- OS	1.000
F2 <--- OS	.935
F3 <--- OS	.975
B3 <--- F2	.751
B1 <--- F2	.710
B20 <--- F1	.726
B19 <--- F1	.649
B18 <--- F1	.821
B17 <--- F1	.682
B16 <--- F1	.521
B14 <--- F1	.750
B10 <--- F1	.850
B9 <--- F1	.865
B6 <--- F1	.747
B5 <--- F1	.715
B11 <--- F3	.794
B8 <--- F3	.833
B15 <--- F2	.836
B2 <--- F2	.742
B13 <--- F3	.375
B12 <--- F3	.750
B7 <--- F3	.728
B4 <--- F3	.836

From the standardised regression weights for the three-factor CFA Model 1 of the OSVS, none of the items shows regression weights $< .3$, although item B13 shows the lowest regression weight at .375. Table 59 provides a breakdown of the modification indices (M.I.) for the regression weights of the three-factor CFA Model 1 for OSVS. For ease of readability Table 59 is split into three columns. Column two follows on column one and column three follows on column 2. Items with a high co-variance are highlighted in yellow.

Table 59: Modification indices for three-factor CFA Model 1 for OSVS (N = 768)

	M.I.	Par Change		M.I.	Par Change		M.I.	Par Change
B13 <--- B2	6.511	.105	B5 <--- B18	7.581	-.058	B18 <--- B5	11.871	-.090
B13 <--- B11	4.760	.079	B5 <--- B19	144.242	.336	B18 <--- B10	23.448	.102
B13 <--- B1	5.530	.087	B5 <--- B20	6.490	.063	B18 <--- B16	4.748	.053
B12 <--- B14	14.923	.101	B5 <--- B3	11.621	-.073	B18 <--- B17	4.383	.050
B12 <--- B3	4.043	-.045	B9 <--- B8	8.694	.060	B18 <--- B19	14.788	-.109
B7 <--- B13	6.072	-.055	B9 <--- B11	4.485	.040	B18 <--- B3	35.039	.128
B7 <--- B8	40.512	.163	B9 <--- B6	6.652	-.054	B19 <--- B7	7.562	-.064
B7 <--- B5	4.777	-.062	B9 <--- B10	5.541	.042	B19 <--- B4	5.855	.056
B7 <--- B16	4.152	.054	B9 <--- B14	6.730	-.055	B19 <--- B2	6.332	-.062
B7 <--- B19	11.642	-.104	B9 <--- B17	4.837	-.045	B19 <--- B5	120.007	.282
B4 <--- B7	5.021	-.047	B9 <--- B3	4.337	-.038	B19 <--- B10	11.569	-.070
B4 <--- B5	30.968	.130	B10 <--- B12	6.963	-.060	B19 <--- B16	4.758	-.052
B4 <--- B19	13.812	.094	B10 <--- B8	4.863	-.050	B19 <--- B18	7.857	-.059
B4 <--- B20	13.015	.081	B10 <--- B5	14.901	-.097	B19 <--- B20	27.944	.131
B4 <--- B1	6.239	-.051	B10 <--- B9	4.956	.048	B19 <--- B1	6.763	-.058
B15 <--- B14	14.072	.092	B10 <--- B14	8.270	-.069	B19 <--- B3	17.373	-.089
B15 <--- B16	17.583	.101	B10 <--- B18	28.378	.110	B20 <--- B4	6.754	.062
B15 <--- B18	5.032	.048	B10 <--- B19	26.354	-.140	B20 <--- B5	6.720	.069
B15 <--- B1	10.298	-.072	B10 <--- B20	8.788	-.072	B20 <--- B10	4.802	-.046
B2 <--- B13	4.672	.045	B10 <--- B3	32.060	.117	B20 <--- B14	5.191	.058
B2 <--- B19	5.055	-.065	B14 <--- B12	16.074	.093	B20 <--- B19	34.780	.169
B2 <--- B1	34.188	.136	B14 <--- B15	5.313	.051	B20 <--- B3	4.622	-.047
B8 <--- B13	4.312	-.039	B14 <--- B10	4.935	-.046	B1 <--- B13	4.187	.049
B8 <--- B7	66.412	.174	B14 <--- B16	18.016	.102	B1 <--- B15	5.495	-.061
B8 <--- B10	5.308	-.043	B14 <--- B19	4.406	.058	B1 <--- B2	30.342	.162
B8 <--- B18	10.560	-.063	B14 <--- B20	5.668	.059	B1 <--- B11	9.166	.078
B8 <--- B1	4.022	.041	B14 <--- B3	4.154	-.043	B1 <--- B19	4.107	-.067
B8 <--- B3	6.581	-.050	B16 <--- B15	5.097	.065	B3 <--- B12	4.044	-.056
B11 <--- B13	12.048	.075	B16 <--- B11	5.210	-.064	B3 <--- B8	4.666	-.060

B11 <--- B14	4.476	-.055	B16 <--- B5	7.944	-.094	B3 <--- B5	8.532	-.089
B11 <--- B16	9.415	-.078	B16 <--- B14	10.386	.103	B3 <--- B10	13.313	.090
B11 <--- B1	14.908	.092	B16 <--- B17	4.696	.066	B3 <--- B14	5.382	-.068
B5 <--- B4	17.743	.098	B17 <--- B16	6.531	.070	B3 <--- B18	17.902	.107
B5 <--- B15	4.988	-.049	B18 <--- B4	6.304	-.060	B3 <--- B19	14.866	-.128
B5 <--- B10	7.862	-.058	B18 <--- B15	4.906	.050			
B5 <--- B16	12.187	-.084	B18 <--- B8	11.055	-.079			

From the co-variances as demonstrated by the modification indices (M.I.) of each item for this model, it is apparent that item B5 shows high co-variance with item B19 and item B7 shows high co-variance with item B8 indicating that items B5 and B19 could be interpreted in the same way and items B7 and B8 could be interpreted in the same way.

Table 60 provides a summary of the key fit indices for three-factor CFA Model 1 for OSVS.

Table 60: Fit Indices for three-factor CFA Model 1 for OSVS (N = 768)

Absolute Fit Indices	
RMSEA	.106
RMR	.053
GFI	.813
AGFI	.765
Relative Fit Indices	
NFI	.861
CFI	.874

Although the RMR for three-factor CFA Model 1 for OSVS indicates model fit, all the other indices indicate that the data do not have a good fit with this model.

Since the data do not fit the first model, it was decided to run a second CFA model on a three factor solution (Model 2). This time items B5 and B19 were combined. For Model 2, a chi-square of 1296.1 (df = 166, $p < .0001$), is obtained. The high ratio of chi-square to df, e.g., $1296.1/166 = 7.8$, is again indicative that the data do not have a good fit with this three-factor model of the OSVS. Modification indices for three-factor CFA Model 2 continue to show a co-variance

between items B7 and B8. Table 61 provides a comparison of fit indices between three-factor CFA Model 1 and CFA Model 2 for OSVS.

Table 61: Comparison of fit indices for three-factor CFA Models 1 and 2 for OSVS (N = 768)

Fit Indices	CFA Model 1	CFA Model 2
Absolute Fit Indices		
RMSEA	.106	.094
RMR	.053	.050
GFI	.813	.845
AGFI	.765	.804
Relative Fit Indices		
NFI	.861	.887
CFI	.874	.900

For three-factor CFA Model 2 for OSVS, the RMSEA is still too high at .094. However, RMR is .050, indicating acceptable model fit and all the other fit indices shows much improvement, approaching acceptable ranges of fit.

The researcher decided to run a third CFA model (Model 3) to see if better fit could be obtained. Items B5 and B19 were combined again and unobserved exogenous variable rb1 was also set. In the first two CFA models the variance of exogenous variable rb1 was negative; a so-called Heywood case. Setting rb1 to a small positive value, 0.0001, is a suggested solution to this problem (Dillon, Kumar & Mulani, 1987). For Model 3, a chi-square of 1296.5 is obtained. The chi-square to df ratio $1296.5/167 = 7.8$, shows no improvement from Model 2. Modification indices for three-factor CFA Model 3 continue to show a co-variance between items A7 and A8. Table 62 provides a comparison of fit indices between three-factor CFA Models 1, 2 and 3 for OSVS.

Table 62: Comparison of fit indices for three-factor CFA Models 1, 2 and 3 for OSVS (N = 768)

Fit Indices	CFA Model 1	CFA Model 2	CFA Model 3
Absolute Fit Indices			
RMSEA	.106	.094	.094
RMR	.053	.050	.050
GFI	.813	.845	.845
AGFI	.765	.804	.805
Relative Fit Indices			
NFI	.861	.887	.887
CFI	.874	.900	.900

Setting unobserved exogenous item rb1 did not make much of a difference to the fit indices for three-factor CFA Model 3 as the only change is a slight change in the AGFI. It was therefore decided to run a fourth model.

A fourth three-factor CFA model for OSVS was run (Model 4); combining items B5 and B19 as well as items B7 and B8 and setting unobserved exogenous variable rb1 again. The chi-square to df ratio of $1139.7/166 = 6.9$, shows a slight digression. Table 63 provides a comparison of fit indices between three-factor CFA Models 1 to 4 for OSVS.

Table 63: Comparison of fit indices for three-factor CFA Models 1, 2, 3 and 4 for OSVS (N = 768)

Fit Indices	CFA Model 1	CFA Model 2	CFA Model 3	CFA Model 4
Absolute Fit Indices				
RMSEA	.106	.094	.094	.088
RMR	.053	.050	.050	.048
GFI	.813	.845	.845	.855
AGFI	.765	.804	.805	.817
Relative Fit Indices				
NFI	.861	.887	.887	.901
CFI	.874	.900	.900	.914

Although the RMSEA for three-factor CFA Model 4 for OSVS indicates a slight improvement, it is still not below .06 and thus still indicates that the data do not fit the model very well. The RMR indicates acceptable model fit at .048. GFI and AGFI are approaching acceptable levels of model fit. NFI and CFI indicate acceptable model fit as both are $> .9$

The one very strong factor with an eigen value of 12.88, appears to confirm the findings in the Van der Walt (2007) and Van der Walt and De Klerk (2014a) studies of the OSVS actually having a one-factor structure. It was decided to also run a one-factor CFA on the OSVS to determine whether a one-factor model would present a better fit.

The first one-factor CFA for OSVS was run without any modifications. For this model, a chi-square to df ratio of $1698.7/170 = 10$ ($p < .0001$) is obtained; indicating that the data do not have a good fit with the model. Table 64 provides the standardised regression weights for each item of one-factor CFA Model 1 for OSVS. All the items represent one factor – OS. Regression weights $< .3$ are highlighted in yellow.

Table 64: Standardised regression weights for one-factor CFA Model 1 for OSVS (N = 768)

	Estimate
B5 <--- OS	.711
B6 <--- OS	.747
B9 <--- OS	.862
B10 <--- OS	.849
B14 <--- OS	.749
B16 <--- OS	.519
B17 <--- OS	.680
B18 <--- OS	.817
B19 <--- OS	.641
B20 <--- OS	.721
B1 <--- OS	.669
B2 <--- OS	.690
B3 <--- OS	.708

	Estimate
B15 <--- OS	.810
B4 <--- OS	.830
B7 <--- OS	.713
B8 <--- OS	.810
B11 <--- OS	.786
B12 <--- OS	.737
rB13 <--- OS	.381

From Table 64 it is evident that all the regression weights for one-factor CFA Model 1 for OSVS look good as none of the items shows a regression weight < .3. The items all measure the one factor. Table 65 provides a breakdown of the modification indices (M.I.) for the regression weights of the one-factor CFA Model 1 for OSVS. For ease of readability Table 65 is split into three columns. Column two follows on column one and column three follows on column 2. Items with a high co-variance are highlighted in yellow.

Table 65: Modification indices for one-factor CFA Model 1 for OSVS (N = 768)

	M.I.	Par Change		M.I.	Par Change		M.I.	Par Change
rB13 <--- B11	4.496	.076	B3 <--- B14	4.709	-.065	B14 <--- B11	4.386	-.045
rB13 <--- B2	4.500	.087	B3 <--- B18	19.717	.115	B14 <--- B15	4.131	.045
B12 <--- B3	6.810	-.059	B3 <--- B19	20.882	-.156	B14 <--- B3	5.416	-.049
B12 <--- B10	4.546	-.047	B3 <--- B20	5.037	-.068	B14 <--- B10	4.447	-.043
B12 <--- B14	14.011	.099	B2 <--- rB13	7.538	.060	B14 <--- B16	18.644	.103
B11 <--- rB13	10.602	.070	B2 <--- B3	12.864	.082	B14 <--- B19	5.514	.065
B11 <--- B3	4.211	-.046	B2 <--- B1	60.322	.187	B14 <--- B20	6.545	.063
B11 <--- B1	10.379	.077	B2 <--- B19	7.992	-.085	B16 <--- B11	5.596	-.067
B11 <--- B14	5.092	-.059	B1 <--- rB13	6.309	.062	B16 <--- B15	4.645	.062
B11 <--- B16	11.203	-.085	B1 <--- B11	6.970	.070	B16 <--- B5	7.208	-.089
B8 <--- B12	5.001	.049	B1 <--- B4	4.986	-.063	B16 <--- B14	10.812	.105
B8 <--- B7	78.753	.194	B1 <--- B3	6.207	.064	B16 <--- B17	5.069	.069
B8 <--- B3	8.823	-.059	B1 <--- B2	57.011	.227	B17 <--- B16	7.010	.073
B8 <--- B9	4.915	.046	B1 <--- B19	8.127	-.097	B18 <--- B8	11.967	-.082
B8 <--- B10	4.966	-.043	B1 <--- B20	4.491	-.064	B18 <--- B4	6.125	-.059
B8 <--- B18	11.581	-.068	B5 <--- B4	17.547	.098	B18 <--- B3	30.668	.120
B7 <--- rB13	5.471	-.053	B5 <--- B15	5.463	-.052	B18 <--- B5	9.387	-.081

B7 <--- B8	53.249	.189	B5 <--- B3	12.615	-.076	B18 <--- B10	25.096	.106
B7 <--- B19	9.373	-.095	B5 <--- B10	6.640	-.053	B18 <--- B16	5.482	.058
B4 <--- B15	6.900	-.052	B5 <--- B16	10.905	-.080	B18 <--- B17	5.253	.055
B4 <--- B1	9.338	-.062	B5 <--- B18	6.091	-.053	B18 <--- B19	11.234	-.096
B4 <--- B5	29.201	.125	B5 <--- B19	149.120	.343	B19 <--- B7	7.720	-.065
B4 <--- B18	6.614	-.049	B5 <--- B20	7.772	.069	B19 <--- B4	6.298	.059
B4 <--- B19	12.618	.089	B9 <--- B8	6.799	.053	B19 <--- B3	17.503	-.089
B4 <--- B20	10.954	.074	B9 <--- B3	5.801	-.044	B19 <--- B2	7.061	-.066
B15 <--- B4	6.172	-.058	B9 <--- B6	5.578	-.050	B19 <--- B1	7.598	-.062
B15 <--- B3	6.240	.053	B9 <--- B10	6.587	.046	B19 <--- B5	123.857	.288
B15 <--- B5	8.132	-.073	B9 <--- B14	5.429	-.050	B19 <--- B10	9.592	-.064
B15 <--- B14	5.395	.057	B10 <--- B12	7.839	-.064	B19 <--- B14	4.019	.050
B15 <--- B16	10.461	.077	B10 <--- B8	6.248	-.057	B19 <--- B18	6.054	-.052
B15 <--- B19	5.066	-.062	B10 <--- B3	26.721	.107	B19 <--- B20	30.664	.138
B3 <--- B12	6.200	-.071	B10 <--- B5	12.461	-.088	B20 <--- B4	6.795	.063
B3 <--- B8	5.862	-.069	B10 <--- B9	5.992	.053	B20 <--- B3	5.247	-.050
B3 <--- B15	4.154	.055	B10 <--- B14	7.323	-.065	B20 <--- B1	5.217	-.053
B3 <--- B2	13.560	.112	B10 <--- B18	30.557	.114	B20 <--- B5	8.023	.075
B3 <--- B1	6.923	.072	B10 <--- B19	21.674	-.126	B20 <--- B14	5.928	.062
B3 <--- B5	12.501	-.111	B10 <--- B20	6.848	-.063	B20 <--- B19	38.110	.178
B3 <--- B10	14.110	.095	B14 <--- B12	14.673	.089			

From the co-variances as demonstrated by the modification indices (M.I.) of each item for this model, it is again apparent that item B5 shows high co-variance with item B19 and item B7 shows high co-variance with item B8. However, this time co-variances are also evident between items B1 and B2. Table 66 provides a summary of the key fit indices for one-factor CFA Model 1 for OSVS.

Table 66: Fit Indices for one-factor CFA Model 1 for OSVS (N = 768)

Absolute Fit Indices	
RMSEA	.108
RMR	.055
GFI	.800
AGFI	.753
Relative Fit Indices	
NFI	.852
CFI	.865

For one-factor CFA Model 1 for OSVS, the RMR is very good at .055, indicating a good fit of the data with the model. However, the RMSEA is high at .108 and the GFI, AGFI, NFI and CFI are all a bit low at .800, .753, .852 and .865 respectively.

It was therefore decided to run a second one-factor CFA model, combining items B5 and B19. For Model 2 a chi-square to df ratio of $1392.8/169 = 8.2$ is obtained, showing some improvement but it is still too high to indicate that the data fit the model. Modification indices for one-factor CFA Model 2 continue to show co-variances between items B7 and B8 and between items B1 and B2. Table 67 provides a comparison of fit indices between one-factor CFA Model 1 and one-factor CFA Model 2 for OSVS.

Table 67: Comparison of fit indices for one-factor CFA Models 1 and 2 for OSVS (N = 768)

Fit Indices	CFA Model 1	CFA Model 2
Absolute Fit Indices		
RMSEA	.108	.097
RMR	.055	.051
GFI	.800	.833
AGFI	.753	.793
Relative Fit Indices		
NFI	.852	.879
CFI	.865	.892

For one-factor CFA Model 2 for OSVS all the fit indices show improvement. RMR indicates excellent model fit at .051 but the RMSEA is still high at .097. GFI, AGFI, NFI and CFI are moving closer to acceptable ranges for model fit, but are still a bit too low.

The researcher therefore decided to run a third one-factor CFA model for OSVS (Model 3); combining items B5 and B19 as well as items B7 and B8. For Model 3, a chi-square to df ratio of $1216.1/168 = 7.2$ is obtained; which is an improvement from Model 2. However, the chi-square to df ratio is still a bit too high to indicate that the data fit the model. Modification indices

for one-factor CFA Model 3 continue to show co-variances between items B1 and B2. Table 68 provides a comparison of fit indices between one-factor CFA Models 1, 2 and 3 for OSVS.

Table 68: Comparison of fit indices for one-factor CFA Models 1, 2 and 3 for OSVS (N = 768)

Fit Indices	CFA Model 1	CFA Model 2	CFA Model 3
Absolute Fit Indices			
RMSEA	.108	.097	.090
RMR	.055	.051	.049
GFI	.800	.833	.844
AGFI	.753	.793	.805
Relative Fit Indices			
NFI	.852	.879	.894
CFI	.865	.892	.907

All the fit indices for one-factor CFA Model 3 for OSVS show improvement from Model 2. RMR indicates excellent model fit at .049; GFI, AGFI, NFI and CFI are all moving closer to acceptable ranges of model fit, with CFI reaching an acceptable range at .907. However, RMSEA is still high at .090.

A fourth one-factor CFA Model for OSVS was run, again with items B5 and B19 combined and items B7 and B8 combined and this time items B1 and B2 were also combined (Model 4). For Model 4, a chi-square to df ratio of $1099.1/167 = 6.6$ is obtained which shows a big improvement from Model 3 but still indicates that the data do not fit the model. Table 69 provides a comparison of fit indices between one-factor CFA Models 1 to 4 for OSVS.

Table 69: Comparison of fit indices for one-factor CFA Models 1, 2, 3 and 4 for OSVS (N= 768)

Fit Indices	CFA Model 1	CFA Model 2	CFA Model 3	CFA Model 4
Absolute Fit Indices				
RMSEA	.108	.097	.090	.085
RMR	.055	.051	.049	.047
GFI	.800	.833	.844	.856
AGFI	.753	.793	.805	.819
Relative Fit Indices				
NFI	.852	.879	.894	.904
CFI	.865	.892	.907	.918

All the fit indices for Model 4 show improvements from Model 3, with RMR and CFI indicating excellent model fit at .047 and .918 respectively. GFI, AGFI and NFI are all moving closer to acceptable ranges of model fit. However, RMSEA is still slightly high at .085. Further analyses were therefore halted and three-factor CFA Model 4 was compared to one-factor CFA Model 4 to determine which model represents the best fit. Table 70 provides a comparison of the fit indices for three-factor CFA Model 4 and one-factor CFA Model 4 for OSVS.

Table 70: Comparison between three-factor CFA Model 4 and one-factor CFA Model 4 for OSVS (N = 768)

Fit Indices	Three-factor CFA Model 4	One-factor CFA Model 4
Absolute Fit Indices		
RMSEA	.088	.085
RMR	.048	.047
GFI	.855	.856
AGFI	.817	.819
Relative Fit Indices		
NFI	.901	.904
CFI	.914	.918

Comparing three-factor CFA Model 4 and one-factor CFA Model 4 of OSVS, it is evident that all fit indices for the one-factor structure are better than the three-factor structure. Table 70 indicates a better fit to the one-factor structure than the three-factor structure with a lower RMSEA; an RMR that indicates better fit at .047 and a GFI and AGFI that is much closer to .9 than for the three-factor structure at .856 and .819 respectively. The NFI and CFI for the one-factor structure also indicates a better fit than the NFI and CFI for the three-factor structure, if only slightly. One can conclude that OSVS has a one-factor structure for this sample, as opposed to the original three-factor structure postulated by Kolodinsky et al. (2008). This is in line with the findings of Van der Walt (2007) and Van der Walt and De Klerk (2014a). It was therefore decided to accept that for the sample in this study, the OSVS represent a one-factor instrument rather than a three-factor instrument. Although not all the indices are within the ideal prescribed ranges, the data still show a close fit to the model. One can therefore accept that the one-factor model of the OSVS, with items linked as describe earlier, is a statistically sound and practical instrument to measure OS for this sample.

2.3 THE SPIRIT AT WORK SCALE (SAW)

The Spirit at Work Scale (SAW) was developed by Kinjerski and Skrypnek (2006) with the intention of assessing the experience of spirit at work as a four-factor construct, consisting of engaging work (Engage), a sense of community (Community), a spiritual connection (Spiritual) and mystical experiences (Mystical). Responses to the SAW were therefore subjected to a four-factor CFA according to the four-factor structure proposed by Kinjerski and Skrypnek (2006) and illustrated in Figure 36.

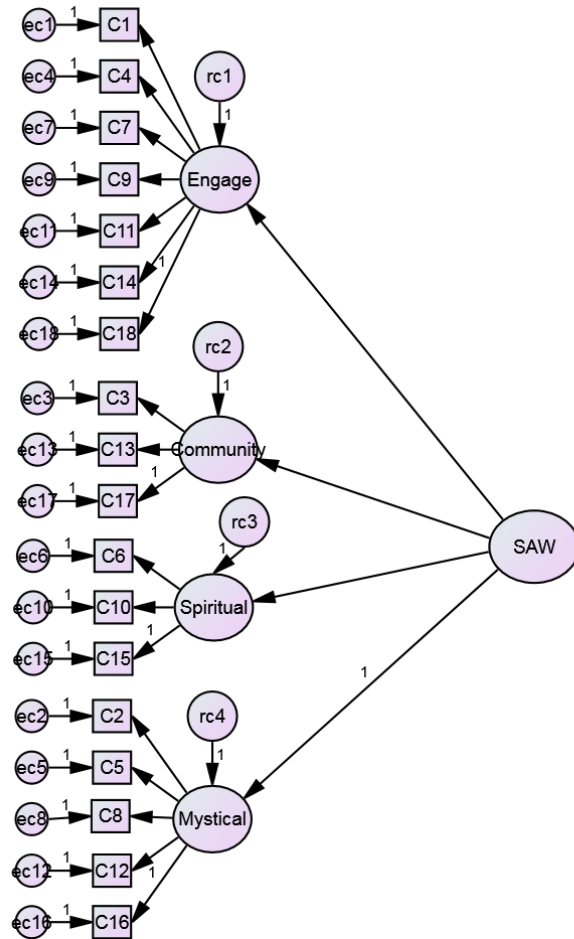


Figure 36: SAW four-factor model diagram

As illustrated in Figure 36, the SAW consists of four factors: (1) engaging work, (2) sense of community, (3) spiritual connection and (4) mystical experience. Engaging work is measured through seven items, sense of community and spiritual connection are measured through three items respectively and mystical experience is measured through five items.

The CFA reveals four factors with eigen values > 1 of which one shows an eigen value of 11.5 and the next three factors shows eigen values of only 2.6, 1.3 and 1 respectively. A chi-square of 876.4 ($df = 131$, $p < .0001$), is obtained from the CFA. The ratio of chi-square to df of $876.4/131 = 6.7$, is slightly too high and thus indicative that the data do not have a good fit with this four-

factor model of the SAW. Table 71 provides the standardised regression weights for each item of four-factor CFA Model 1 for SAW. 'F' in the table refers to 'Factor' – there are four factors – and 'SAW' is the construct being measured. The standardised regression weights indicate which items load onto which factor in the SAW. Items with low regression weights are highlighted in yellow.

Table 71: Standardised regression weights for four-factor CFA Model 1 for SAW (N = 768)

	Estimate
F1 <--- SAW	.983
F2 <--- SAW	.846
F3 <--- SAW	.650
F4 <--- SAW	.910
C18 <--- F1	.768
C14 <--- F1	.800
C11 <--- F1	.789
C9 <--- F1	.815
C7 <--- F1	.738
C4 <--- F1	.818
C1 <--- F1	.689
C17 <--- F2	.825
C13 <--- F2	.844
C3 <--- F2	.746
C15 <--- F3	.893
C10 <--- F3	.793
C6 <--- F3	.842
C16 <--- F4	.787
C12 <--- F4	.449
C8 <--- F4	.832
C5 <--- F4	.847
C2 <--- F4	.747

From the standardised regression weights for the four-factor CFA Model 1 of the SAW, none of the items show regression weights < .3. Item C12 shows the lowest regression weight at .449. Table 72 provides a breakdown of the modification indices (M.I.) for the regression weights of the four-factor CFA Model 1 for SAW. For ease of readability Table 72 is split into three columns. Column two follows on column one and column three follows on column 2. Items with a high co-variance are highlighted in yellow.

Table 72: Modification indices for four-factor CFA Model 1 for SAW (N = 768)

	M.I.	Par Change		M.I.	Par Change		M.I.	Par Change
C2 <--- FC3	7.413	-.049	C6 <--- C1	17.267	.120	C4 <--- C2	9.805	.074
C2 <--- C16	7.293	-.053	C6 <--- C4	14.924	.118	C4 <--- C12	5.801	-.041
C2 <--- C10	7.958	-.046	C6 <--- C7	12.493	.116	C4 <--- C16	7.019	-.049
C2 <--- C15	16.889	-.063	C6 <--- C9	6.543	.062	C4 <--- C6	7.067	-.044
C2 <--- C1	19.611	.100	C6 <--- C11	5.743	.058	C4 <--- C10	14.024	-.057
C2 <--- C4	9.489	.073	C6 <--- C14	4.867	.065	C4 <--- C15	23.008	-.069
C2 <--- C11	5.922	-.046	C10 <--- FC4	5.752	-.093	C4 <--- C3	20.350	.098
C5 <--- FC3	5.515	-.045	C10 <--- C2	6.741	-.098	C4 <--- C1	8.731	.062
C5 <--- C2	4.857	.060	C10 <--- C5	12.021	-.104	C4 <--- C7	4.023	.048
C5 <--- C12	4.253	-.040	C10 <--- C8	5.427	-.071	C4 <--- C11	4.197	-.036
C5 <--- C10	12.601	-.062	C10 <--- C18	4.888	-.058	C7 <--- FC3	6.227	-.045
C5 <--- C15	11.127	-.054	C15 <--- SAW	6.965	-.104	C7 <--- C2	5.101	.057
C5 <--- C11	7.030	-.053	C15 <--- FC4	7.878	-.101	C7 <--- C8	8.846	.060
C8 <--- C12	7.544	.054	C15 <--- FC2	9.873	-.108	C7 <--- C15	10.575	-.049
C8 <--- C6	5.457	.044	C15 <--- FC1	6.654	-.085	C7 <--- C17	9.003	-.058
C8 <--- C3	5.271	-.058	C15 <--- C2	27.880	-.185	C9 <--- C2	4.613	-.065
C8 <--- C17	4.202	-.043	C15 <--- C5	16.880	-.115	C9 <--- C12	4.364	.045
C8 <--- C1	5.375	-.057	C15 <--- C8	4.384	-.059	C9 <--- C15	4.633	.039
C8 <--- C7	6.945	.073	C15 <--- C3	23.907	-.157	C9 <--- C3	13.166	-.101
C8 <--- C18	9.854	-.061	C15 <--- C13	6.740	-.078	C9 <--- C1	4.046	-.054
C12 <--- C15	4.857	.061	C15 <--- C1	18.235	-.132	C9 <--- C11	8.021	.064
C12 <--- C3	4.518	-.089	C15 <--- C4	18.174	-.140	C11 <--- FC3	60.176	.174
C16 <--- FC3	26.115	.112	C15 <--- C7	15.821	-.140	C11 <--- C2	8.237	-.090
C16 <--- C2	8.780	-.091	C3 <--- FC3	10.175	-.064	C11 <--- C12	6.670	.058
C16 <--- C6	7.985	.060	C3 <--- C8	4.738	-.050	C11 <--- C16	6.507	.062
C16 <--- C10	20.722	.090	C3 <--- C12	10.586	-.066	C11 <--- C6	31.087	.121
C16 <--- C15	43.234	.122	C3 <--- C16	7.276	-.059	C11 <--- C10	69.836	.169
C16 <--- C17	18.076	.100	C3 <--- C15	17.716	-.072	C11 <--- C15	73.114	.162
C16 <--- C4	4.976	-.064	C3 <--- C4	7.332	.072	C11 <--- C3	10.904	-.095

C16 <--- C11	7.022	.061	C3 <--- C9	9.667	-.065	C11 <--- C13	5.963	.066
C6 <--- SAW	19.072	.161	C3 <--- C11	17.187	-.088	C11 <--- C1	5.648	-.066
C6 <--- FC4	34.954	.199	C3 <--- C14	4.036	-.051	C11 <--- C9	6.981	.061
C6 <--- FC2	18.281	.137	C13 <--- C10	4.048	.035	C11 <--- C18	7.642	-.061
C6 <--- FC1	17.072	.128	C13 <--- C11	10.727	.065	C18 <--- FC3	7.461	-.067
C6 <--- C2	42.299	.212	C17 <--- C16	14.723	.092	C18 <--- C8	7.786	-.078
C6 <--- C5	49.073	.183	C17 <--- C18	9.619	.067	C18 <--- C6	10.502	-.077
C6 <--- C8	34.932	.156	C1 <--- C2	11.890	.105	C18 <--- C10	9.313	-.068
C6 <--- C12	7.256	.063	C1 <--- C15	4.946	-.041	C18 <--- C15	4.599	-.045
C6 <--- C16	8.539	.074	C1 <--- C3	12.768	.100	C18 <--- C3	11.945	.109
C6 <--- C3	14.518	.114	C1 <--- C17	4.735	.051	C18 <--- C17	13.440	.097
C6 <--- C13	10.549	.091	C1 <--- C4	5.103	.064	C18 <--- C11	6.941	-.068
C6 <--- C17	12.993	.090	C4 <--- FC3	15.828	-.067			

From Table 72 it is evident that none of the items in the SAW co-vary with any of the other items in the instrument. The modification indices for each item in this instrument indicate that the different items therefore measure the factors as indicated with no overlap between factors.

Table 73 provides a summary of the key fit indices for four-factor CFA Model 1 for SAW.

Table 73: Fit Indices for four-factor CFA Model 1 for SAW (N = 768)

Absolute Fit Indices	
RMSEA	.086
RMR	.070
GFI	.862
AGFI	.820
Relative Fit Indices	
NFI	.909
CFI	.922

For four-factor CFA Model 1, RMR is at .070, NFI at .909 and CFI at .922; indicating that the data fit the model. However, the RMSEA is a bit too high at .086 and the other fit indices are approaching acceptable ranges for model fit.

It was decided to run a second four-factor CFA Model for SAW (Model 2) to see if the model fit could be improved. This time item C12 was omitted as it shows the lowest regression weight at .449. All the other items show regression weights above .6. For Model 2, a chi-square to df ratio of $841.2/115 = 7.3$ is obtained. The chi-square to df ratio is thus worse than for Model 1 and again indicates that the data do not fit the model. Standardised regression weights for four-factor CFA Model 2 for SAW, do not reveal any other items that show low regression weights. Modification indices for four-factor CFA Model 2 still do not indicate any co-variances between items. Table 74 provides a comparison of fit indices between four-factor CFA Model 1 and CFA Model 2 for SAW.

Table 74: Comparison of fit indices for four-factor CFA Models 1 and 2 for SAW (N = 768)

Fit Indices	CFA Model 1	CFA Model 2
Absolute Fit Indices		
RMSEA	.086	.091
RMR	.070	.071
GFI	.862	.862
AGFI	.820	.817
Relative Fit Indices		
NFI	.909	.911
CFI	.922	.922

Apart from a slight improvement in NFI, four-factor CFA Model 2 for SAW does not indicate a better fit to the data. In fact, most of the indices worsen slightly with RMSEA moving to .091 and AGFI moving to .817 and thus indicating a worse fit between the data and Model 2. AGFI and CFI did not change.

The fact that the eigen values for the CFA pointed to one-factor that was much stronger than the other two factors, raises the possibility of the SAW also being a one-factor instrument like the OSVS. The researcher therefore decided to also run a one-factor CFA on the SAW to determine if a better fit could be obtained.

The one-factor CFA for SAW was run without any modifications. For this model, a chi-square to df ratio of $2027/135 = 15$ is obtained. This very high chi-square to df ratio indicates that the data do not fit the one-factor model of SAW. Table 75 indicates the standardised regression weights for each item of one-factor CFA Model 1 for SAW. 'F' in the table refers to 'Factor' – there is just one factor – and 'SAW' is the construct/factor being measured. The standardised regression weights indicate which items load onto which factor in the SAW. Items with low regression weights are highlighted in yellow.

Table 75: Standardised regression weights for one-factor CFA Model 1 for SAW (N = 768)

	Estimate
C1 <--- SAW	.679
C4 <--- SAW	.795
C7 <--- SAW	.720
C9 <--- SAW	.797
C11 <--- SAW	.792
C14 <--- SAW	.777
C18 <--- SAW	.750
C3 <--- SAW	.619
C13 <--- SAW	.737
C17 <--- SAW	.722
C6 <--- SAW	.659
C10 <--- SAW	.519
C15 <--- SAW	.582
C2 <--- SAW	.702
C5 <--- SAW	.786
C8 <--- SAW	.779
C12 <--- SAW	.426
C16 <--- SAW	.758

Standardised regression weights for one-factor CFA Model 1 for SAW, indicate that item C12 shows a lower regression weight than all the other items at .426. All other items show regression weights of .6 or higher. Table 76 provides a breakdown of the modification indices (M.I.) for the

regression weights of the one-factor CFA Model 1 for SAW. For ease of readability Table 76 is split into three columns. Column two follows on column one and column three follows on column 2. Items with a high co-variance are highlighted in yellow.

Table 76: Modification indices for one-factor CFA Model 1 for SAW (N = 768)

	M.I.	Par Change		M.I.	Par Change		M.I.	Par Change
C2 <--- C5	22.177	.099	C10 <--- C6	96.228	.328	C1 <--- C18	5.268	.049
C2 <--- C8	9.195	.065	C10 <--- C15	198.042	.410	C4 <--- C2	7.310	.066
C2 <--- C10	16.555	-.069	C10 <--- C4	9.781	-.142	C4 <--- C12	8.822	-.052
C2 <--- C15	23.595	-.077	C10 <--- C7	5.001	-.109	C4 <--- C16	12.561	-.067
C2 <--- C13	6.680	-.058	C10 <--- C11	21.027	.165	C4 <--- C6	15.480	-.066
C2 <--- C17	6.310	-.051	C10 <--- C18	8.763	-.101	C4 <--- C10	20.754	-.072
C2 <--- C1	9.617	.072	C15 <--- C2	17.682	-.207	C4 <--- C15	31.104	-.082
C2 <--- C4	5.121	.056	C15 <--- C5	8.121	-.112	C4 <--- C3	16.382	.091
C2 <--- C11	10.744	-.064	C15 <--- C16	10.839	.126	C4 <--- C1	14.937	.084
C5 <--- C2	30.326	.160	C15 <--- C6	155.583	.425	C4 <--- C7	11.119	.082
C5 <--- C8	15.153	.091	C15 <--- C10	220.601	.472	C4 <--- C18	7.371	.047
C5 <--- C16	13.134	.082	C15 <--- C3	16.687	-.185	C7 <--- C8	5.212	.047
C5 <--- C10	20.736	-.085	C15 <--- C1	8.000	-.123	C7 <--- C6	7.439	-.048
C5 <--- C15	14.820	-.067	C15 <--- C4	16.328	-.187	C7 <--- C10	7.861	-.046
C5 <--- C13	4.118	-.051	C15 <--- C7	11.750	-.170	C7 <--- C15	16.582	-.063
C5 <--- C11	9.694	-.068	C15 <--- C11	23.916	.180	C7 <--- C17	10.325	-.063
C8 <--- C2	12.191	.102	C15 <--- C18	6.122	-.086	C7 <--- C4	8.237	.069
C8 <--- C5	14.692	.089	C3 <--- C8	6.665	-.066	C7 <--- C14	5.253	.053
C8 <--- C12	17.646	.087	C3 <--- C12	9.832	-.070	C9 <--- C2	5.699	-.074
C8 <--- C16	10.260	.073	C3 <--- C6	4.296	-.045	C9 <--- C3	13.615	-.104
C8 <--- C3	10.953	-.088	C3 <--- C10	4.145	-.041	C9 <--- C11	10.134	.073
C8 <--- C13	4.606	-.054	C3 <--- C15	17.967	-.080	C11 <--- C2	15.161	-.120
C8 <--- C17	9.433	-.068	C3 <--- C13	43.560	.178	C11 <--- C5	10.003	-.078
C8 <--- C1	8.826	-.077	C3 <--- C17	43.707	.159	C11 <--- C6	11.117	.071
C8 <--- C7	6.535	.075	C3 <--- C1	8.815	.083	C11 <--- C10	44.103	.132
C8 <--- C18	12.331	-.072	C3 <--- C4	9.258	.090	C11 <--- C15	45.032	.125
C12 <--- C8	7.939	.105	C3 <--- C9	7.607	-.064	C11 <--- C3	17.291	-.117
C12 <--- C3	7.269	-.114	C3 <--- C11	9.887	-.074	C11 <--- C1	4.425	-.057
C16 <--- C5	11.678	.086	C3 <--- C18	6.574	.057	C11 <--- C9	9.903	.072
C16 <--- C8	9.408	.078	C13 <--- C2	7.492	-.080	C11 <--- C18	4.858	-.048
C16 <--- C12	6.078	.055	C13 <--- C3	60.555	.209	C14 <--- C6	9.504	-.056
C16 <--- C15	17.585	.079	C13 <--- C17	39.271	.140	C14 <--- C10	6.512	-.043
C16 <--- C3	5.962	-.070	C17 <--- C2	6.719	-.087	C14 <--- C7	6.534	.068

C16 <--- C1	10.684	-.091	C17 <--- C8	7.576	-.075	C14 <--- C18	4.745	.040
C16 <--- C4	10.698	-.096	C17 <--- C3	57.690	.234	C18 <--- C8	10.936	-.094
C6 <--- C10	126.958	.291	C17 <--- C13	37.288	.176	C18 <--- C6	19.731	-.108
C6 <--- C15	184.276	.328	C17 <--- C7	10.397	-.109	C18 <--- C10	15.317	-.088
C6 <--- C3	4.726	-.080	C17 <--- C18	8.779	.070	C18 <--- C15	9.606	-.066
C6 <--- C4	9.624	-.116	C1 <--- C2	8.979	.092	C18 <--- C3	9.582	.099
C6 <--- C7	6.244	-.101	C1 <--- C8	6.214	-.062	C18 <--- C17	9.694	.083
C6 <--- C11	6.993	.079	C1 <--- C12	5.881	-.053	C18 <--- C1	6.635	.080
C6 <--- C14	6.414	-.091	C1 <--- C16	8.204	-.068	C18 <--- C4	6.072	.081
C6 <--- C18	14.893	-.109	C1 <--- C15	9.967	-.058	C18 <--- C11	4.048	-.053
C10 <--- C2	11.137	-.161	C1 <--- C3	10.200	.090	C18 <--- C14	4.242	.065
C10 <--- C5	10.201	-.124	C1 <--- C4	9.768	.090			

The Modification Indices (M.I.) indicate co-variances between items C10 and C15 as well as between items C6 and C15.

Table 77 provides a summary of the key fit indices for one-factor CFA Model 1 for SAW.

Table 77: Fit Indices for one-factor CFA Model 1 for SAW (N = 768)

Absolute Fit Indices	
RMSEA	.135
RMR	.115
GFI	.733
AGFI	.661
Relative Fit Indices	
NFI	.790
CFI	.801

For one-factor CFA Model 1 for SAW, the RMSEA is high at .135 and thus indicates that the data do not fit the model. The RMR is high at .115, again indicating that the data do not fit the model. The GFI, AGFI, NFI and CFI are all below the acceptable ranges for model fit. Thus, all the indices indicate that the data do not fit one-factor CFA Model 1 for SAW.

It was decided to run a second one-factor CFA model for SAW (Model 2). In this model, items C10 and C15 were combined. For Model 2, a chi-square to df ratio of $1645.5/134 = 12.2$ is

obtained; which is lower than for Model 1, but still too high to indicate a good model fit. Standardised regression weights for one-factor CFA Model 2 for SAW, indicate that item C12 shows a lower regression weight than all the other items at .423. Modification indices for Model 2 continue to show co-variance between items C6 and C15. Table 78 provides a comparison of fit indices between one-factor CFA Model 1 and CFA Model 2 for SAW.

Table 78: Comparison of fit indices for one-factor CFA Models 1 and 2 for SAW (N = 768)

Fit Indices	CFA Model 1	CFA Model 2
Absolute Fit Indices		
RMSEA	.135	.121
RMR	.115	.097
GFI	.733	.785
AGFI	.661	.726
Relative Fit Indices		
NFI	.790	.830
CFI	.801	.841

For one-factor CFA Model 2 for SAW, all the fit indices improve from Model 1, but none of the indices are near acceptable ranges for model fit.

It was decided to run a third one-factor CFA for SAW (Model 3) to determine if a better fit could be achieved. In Model 3 items C10 and C15 were combined again. This time however, item C15 was also combined with item C6. For Model 3, a chi-square to df ratio of $1476.2/133 = 11$ is obtained; which is lower than for Model 2, but still too high to indicate a good fit. Standardised regression weights for one-factor CFA Model 3 for SAW, indicate that item C12 continues to show a lower regression weight than all the other items at .422. Modification indices for Model 3 do not indicate any other co-variances. Table 79 provides a comparison of fit indices between one-factor CFA Models 1, 2 and 3 for SAW.

Table 79: Comparison of fit indices for one-factor CFA Models 1, 2 and 3 for SAW (N = 768)

Fit Indices	CFA Model 1	CFA Model 2	CFA Model 3
Absolute Fit Indices			
RMSEA	.135	.121	.115
RMR	.115	.097	.089
GFI	.733	.785	.796
AGFI	.661	.726	.738
Relative Fit Indices			
NFI	.790	.830	.847
CFI	.801	.841	.859

Although the fit indices for Model 3 show improvement from Model 2, none of the indices reach acceptable ranges for model fit. A final one-factor CFA model for SAW was run (Model 4); again combining item C15 with item C10 and with item C6. This time however, item C12 was also omitted, because it showed a lower regression weight than any of the other items. For Model 4, a chi-square to df ratio of $1427.2/117 = 12.1$ is obtained. This chi-square value is actually worse than the chi-square value for Model 3 and once again points to a model that do not fit. None of the items show low standardised regression weights and the modification indices also do not indicate any co-variances. Table 80 provides a comparison of fit indices between one-factor CFA Models 1 to 4 for SAW.

Table 80: Comparison of fit indices for one-factor CFA Models 1, 2, 3 and 4 for SAW (N = 768)

Fit Indices	CFA Model 1	CFA Model 2	CFA Model 3	CFA Model 4
Absolute Fit Indices				
RMSEA	.135	.121	.115	.121
RMR	.115	.097	.089	.091
GFI	.733	.785	.796	.795
AGFI	.661	.726	.738	.732
Relative Fit Indices				
NFI	.790	.830	.847	.849
CFI	.801	.841	.859	.860

Again, none of the fit indices show any improvement to the point where the required thresholds can be reached to obtain model fit. One-factor CFA Model 4 for SAW is therefore also rejected.

Further analyses were therefore halted and four-factor CFA Model 2 was compared to one-factor CFA Model 4 to determine which model represents the best fit. Table 81 provides a comparison between four-factor CFA Model 2 and one-factor CFA Model 4 for SAW.

Table 81: Comparison between four-factor CFA Model 2 and one-factor CFA Model 4 for SAW (N = 768)

Fit Indices	Four-factor CFA Model 2	One-factor CFA Model 4
Absolute Fit Indices		
RMSEA	.091	.121
RMR	.071	.091
GFI	.862	.795
AGFI	.817	.732
Relative Fit Indices		
NFI	.911	.849
CFI	.922	.860

Comparing four-factor CFA Model 2 and one-factor CFA Model 4 of SAW, it is evident that the data fits the four-factor CFA model better than the one factor model on all indices. Although not all the indices are within the prescribed ranges, the data still show a close fit to the model. RMR for the four-factor structure indicate a good fit at .071. NFI and CFI are above the .9 threshold, with NFI at .911 indicating that the index is closely approaching acceptable model fit and the CFI at .922 indicating acceptable model fit. RMSEA, GFI and AGFI also closely approach prescribed acceptable ranges of fit in the four-factor structure. These findings are in-line with the findings of Kinjerski & Skrypnek (2006); Stevison et al. (2009) and Tevichapong (2009). The original four-factor structure for SAW found in previous studies is thus confirmed. One can accept that the four-factor model of the SAW, with items removed as describe earlier, is a statistically sound and practical instrument to measure SAW for this sample.

2.4 THE UTRECHT WORK ENGAGEMENT SCALE (UWES)

The Utrecht Work Engagement Scale (UWES) was developed by Schaufeli and Bakker (2003). It is a self-report questionnaire that measures three dimensions of work engagement: vigour, dedication and absorption (Schaufeli et al., 2006, p. 702). Responses to the UWES were subjected to a three-factor CFA according to the three-factor model proposed by Schaufeli and Bakker (2003) and as indicated in Figure 37.

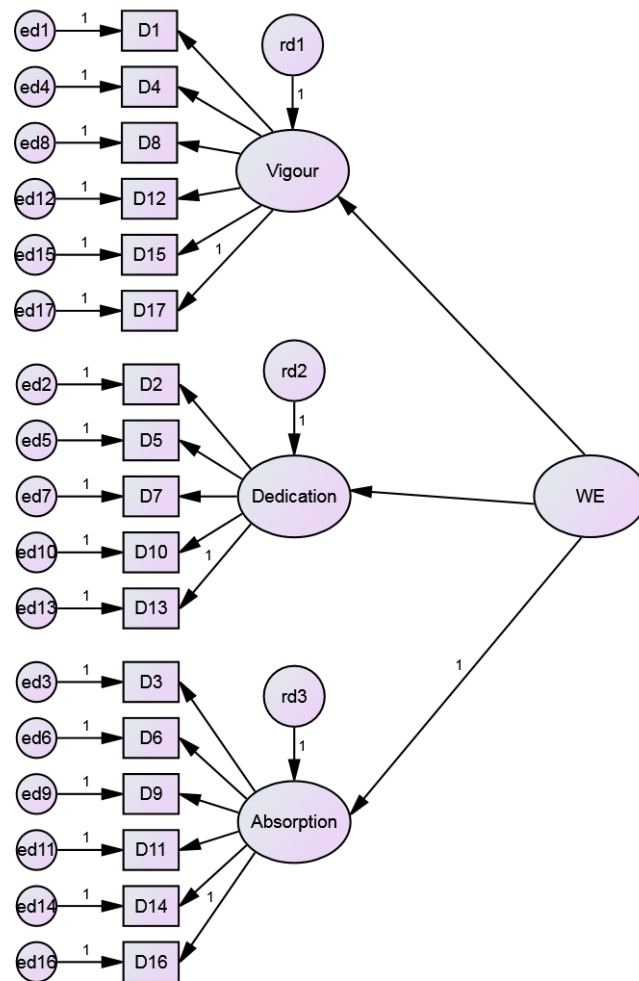


Figure 37: UWES three-factor model diagram

As indicated in Figure 37, the UWES (and consequently the variable work engagement (WE)) consists of three factors: (1) vigour, (2) dedication and (3) absorption. Vigour is measured through six items, dedication through five items and absorption through six items.

Despite other studies as indicated in section 3.1.5 confirming three separate factors, the CFA revealed only two eigen values > 1 , of which one showed an eigen value of 7.8 and the next factor showed an eigen value of only 1.3. A chi-square of 1076.1 ($df = 116$, $p < .0001$), is obtained. The ratio of chi-square to df , e.g., $1076.1/116 = 9.2$, indicate that the data do not have a good fit with this model of UWES. Table 82 provides the standardised regression weights for each item of three-factor CFA Model for UWES. The standardised regression weights indicate which items load onto which factor in the UWES. Items with regression weights $< .3$ are highlighted in yellow.

Table 82: Standardised regression weights for three-factor CFA for UWES ($N = 768$)

				Estimate
Vigour	<---	WE		.988
Dedication	<---	WE		.977
Absorption	<---	WE		.925
D17	<---	Vigour		.490
D15	<---	Vigour		.651
D12	<---	Vigour		.588
D8	<---	Vigour		.811
D4	<---	Vigour		.845
D1	<---	Vigour		.780
D13	<---	Dedication		.687
D10	<---	Dedication		.689
D7	<---	Dedication		.890
D5	<---	Dedication		.851
D2	<---	Dedication		.809
D16	<---	Absorption		.541
D14	<---	Absorption		.773
D11	<---	Absorption		.816

		Estimate
D9	<--- Absorption	.708
D6	<--- Absorption	.718
D3	<--- Absorption	.755

From the standardised regression weights for the three-factor CFA Model of the UWES, none of the items show regression weights < .3. There is no item with a markedly lower regression weight than the other items either. Table 83 provides a breakdown of the modification indices (M.I.) for the regression weights of the three-factor CFA Model for UWES. For ease of readability Table 83 is split into three columns. Column two follows on column one and column three follows on column 2. Items with a high co-variance are highlighted in yellow.

Table 83: Modification indices for three-factor CFA for UWES (N = 768)

	M.I.	Par Change		M.I.	Par Change		M.I.	Par Change
D3 <--- WE	4.865	.091	D16 <--- D2	4.174	-.070	D1 <--- D12	10.277	-.076
D3 <--- Dedication	5.430	.079	D16 <--- D5	8.908	-.112	D4 <--- D11	4.629	-.047
D3 <--- Vigour	6.098	.160	D16 <--- D10	10.489	-.147	D4 <--- D16	12.289	-.061
D3 <--- D9	13.147	-.098	D16 <--- D13	4.573	.075	D4 <--- D13	9.405	-.060
D3 <--- D14	4.307	-.045	D16 <--- D1	7.700	-.107	D8 <--- D14	5.210	-.053
D3 <--- D16	5.033	-.045	D16 <--- D4	10.506	-.121	D8 <--- D16	9.733	-.066
D3 <--- D2	7.252	.060	D16 <--- D8	10.840	-.108	D8 <--- D5	4.472	.055
D3 <--- D5	13.275	.089	D16 <--- D12	15.474	.150	D8 <--- D10	5.931	-.076
D3 <--- D1	4.971	.056	D2 <--- D11	11.099	-.084	D8 <--- D12	17.578	-.110
D3 <--- D4	16.139	.097	D2 <--- D1	6.379	.064	D8 <--- D15	6.289	-.068
D3 <--- D8	13.682	.079	D2 <--- D12	14.229	-.094	D8 <--- D17	12.814	-.117
D6 <--- D14	7.123	.071	D2 <--- D15	6.078	-.064	D12 <--- Absorption	11.116	.155
D6 <--- D16	13.868	.091	D2 <--- D17	17.312	-.129	D12 <--- D3	7.672	.083
D6 <--- D5	4.460	-.063	D5 <--- D14	6.326	-.046	D12 <--- D6	14.357	.098
D6 <--- D13	8.549	-.080	D5 <--- D16	7.805	-.047	D12 <--- D11	39.185	.189
D6 <--- D8	5.387	-.060	D5 <--- D10	6.781	.065	D12 <--- D14	42.133	.170
D6 <--- D15	4.207	-.064	D5 <--- D12	6.324	-.053	D12 <--- D16	46.991	.165
D9 <--- D3	11.001	-.082	D7 <--- D10	11.051	-.082	D12 <--- D2	8.343	-.077
D9 <--- D10	12.221	.102	D7 <--- D8	4.598	.038	D12 <--- D7	4.382	-.056
D9 <--- D8	4.448	.044	D7 <--- D12	12.667	-.074	D12 <--- D13	11.922	.094
D9 <--- D17	5.739	.073	D7 <--- D17	13.723	-.096	D12 <--- D1	5.759	-.072
D11 <--- D3	4.379	-.048	D10 <--- D9	10.119	.078	D12 <--- D8	8.372	-.074

D11 <--- D2	6.424	-.051	D10 <--- D11	21.740	.107	D12 <--- D15	7.789	.086
D11 <--- D10	29.417	.145	D10 <--- D8	4.027	-.039	D12 <--- D17	29.928	.202
D11 <--- D13	6.434	.052	D10 <--- D15	6.717	.061	D15 <--- D14	4.433	.050
D11 <--- D12	30.177	.124	D10 <--- D17	11.390	.095	D15 <--- D10	5.258	.074
D14 <--- D3	4.665	-.061	D13 <--- D11	10.284	.096	D15 <--- D13	5.137	.056
D14 <--- D6	8.904	.072	D13 <--- D14	35.275	.155	D15 <--- D12	8.951	.081
D14 <--- D16	42.250	.146	D13 <--- D16	23.485	.116	D15 <--- D17	42.236	.219
D14 <--- D5	6.874	-.072	D13 <--- D4	4.720	-.063	D17 <--- D16	7.700	.058
D14 <--- D10	6.072	-.081	D13 <--- D12	17.203	.122	D17 <--- D2	9.599	-.071
D14 <--- D13	22.820	.121	D13 <--- D15	6.065	.075	D17 <--- D7	4.844	-.051
D14 <--- D1	4.127	-.057	D1 <--- D11	5.451	-.056	D17 <--- D10	5.412	.071
D14 <--- D8	6.884	-.062	D1 <--- D14	4.100	-.042	D17 <--- D8	5.182	-.050
D14 <--- D12	22.846	.133	D1 <--- D16	6.594	-.049	D17 <--- D12	25.409	.129
D16 <--- D6	8.969	.100	D1 <--- D2	5.335	.049	D17 <--- D15	31.201	.148
D16 <--- D14	21.856	.157	D1 <--- D10	4.437	-.059			

From Table 83 it is evident that none of the items in the UWES co-vary with any of the other items in the instrument. The modification indices for each item in this instrument indicate that the different items therefore measure the factors as indicated with no overlap between factors. Table 84 provides a summary of the key fit indices for the three-factor CFA for UWES.

Table 84: Fit Indices for three-factor CFA for UWES (N = 768)

Absolute Fit Indices	
RMSEA	.104
RMR	.050
GFI	.833
AGFI	.780
Relative Fit Indices	
NFI	.879
CFI	.891

For the three-factor CFA for UWES, the RMSEA is high at .104 and thus indicates that the data do not fit the model. The RMR however, is .050; indicating excellent model fit. GFI, AGFI, NFI and CFI are a bit low, but closely approaching acceptable ranges. Since none of the CFA statistics reveal items that do not fit or items that co-vary and since RMR indicates excellent model fit with the other fit indices (i.e. GFI, AGFI, NFI and CFI) approaching prescribed

acceptable ranges of fit, it was decided to accept the UWES as a three-factor model. In addition, the UWES has been confirmed as a three-factor structure in previous studies (Hakanen, 2002; Schaufeli et al., 2002; Schaufeli & Bakker, 2003; Seppälä et al., 2009; Xanthopoulou et al., 2012; Yi-Wen & Yi-Qun, 2005), including South Africa (Storm & Rothmann, 2003). Thus, although not all the indices are within the prescribed ranges, the data still show a close fit to the model and one can accept that the three-factor model of the UWES, without any modifications, is a statistically sound and practical instrument to measure WE for this sample.

2.5 THE AFFECTIVE ORGANISATIONAL COMMITMENT SCALE (AOCS)

A one-factor CFA on the Meyer and Allen's Affective Organisational Commitment Scale (AOCS) was run to determine whether previous research findings about the scale could be confirmed. The one-factor instrument is represented in Figure 38.

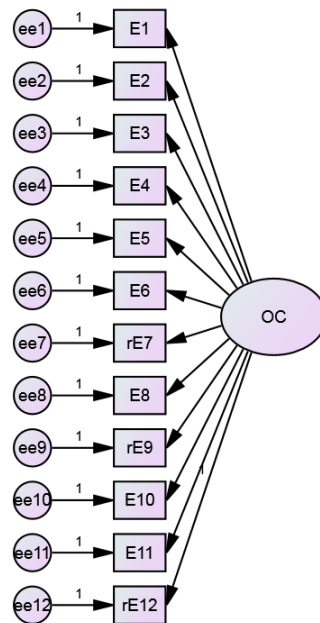


Figure 38: AOCS one-factor model diagram

Figure 38 illustrates that the one-factor for the Affective Organisational Commitment Scale is measured through 12 items.

The CFA revealed two factors with eigen values > 1 , of which one showed an eigen value of 7.1 and the next factor showed an eigen value of 1.1. The large difference between these two eigen values indicate that the OC construct may only consist of one factor. A chi-square of 421 ($df = 54$, $p < .0001$) is obtained. The ratio of chi-square to df , e.g., $421/54 = 7.8$, indicate that the data do not have a good fit with this model of the AOCS. Table 85 provides the standardised regression weights for each item of one-factor CFA for the AOCS. All the items represent one factor. Items with low regression weights are highlighted in yellow.

Table 85: Standardised regression weights for one-factor CFA for AOCS ($N = 768$)

	Estimate
E10 <--- OC	.808
E9 <--- OC	.331
E8 <--- OC	.723
E7 <--- OC	.445
E6 <--- OC	.779
E5 <--- OC	.777
E4 <--- OC	.904
E3 <--- OC	.888
E2 <--- OC	.869
E1 <--- OC	.908
E11 <--- OC	.752
E12 <--- OC	.561

From the standardised regression weights for the one-factor CFA model of the AOCS, none of the items show regression weights $< .3$, although items E9 and E7 show lower regression weights than the other items at .331 and .445 respectively. Table 86 provides a breakdown of the modification indices (M.I.) for the regression weights of the one-factor CFA for the AOCS. For ease of readability Table 86 is split into two columns. Column two follows on column one. Items with a high co-variance are highlighted in yellow.

Table 86: Modification indices for one-factor CFA for AOCS (N = 768)

	M.I.	Par Change		M.I.	Par Change
E12 <--- E6	6.012	-.066	E4 <--- E9	6.353	-.034
E12 <--- E7	20.119	.093	E6 <--- E12	10.946	-.087
E12 <--- E9	24.582	.104	E6 <--- E11	8.449	.077
E11 <--- E6	7.563	.059	E6 <--- E8	22.348	.155
E11 <--- E8	40.607	.192	E7 <--- E12	17.041	.195
E1 <--- E11	5.465	-.047	E7 <--- E9	33.402	.191
E1 <--- E2	10.600	.053	E8 <--- E11	36.698	.126
E1 <--- E8	8.164	-.071	E8 <--- E2	7.840	-.047
E2 <--- E1	7.076	.052	E8 <--- E6	18.080	.078
E2 <--- E8	16.735	-.119	E9 <--- E12	18.663	.211
E3 <--- E4	4.614	.037	E9 <--- E7	29.940	.184
E4 <--- E3	5.507	.042			

From Table 86 it is evident that none of the items in the AOCS co-vary with any of the other items in the instrument. The modification indices for each item in this instrument indicate no overlap between items leading to additional factors. Table 87 provides a summary of the key fit indices for the one-factor CFA for the AOCS.

Table 87: Fit Indices for one-factor CFA for AOCS (N = 768)

Absolute Fit Indices	
RMSEA	.094
RMR	.056
GFI	.912
AGFI	.872
Relative Fit Indices	
NFI	.938
CFI	.946

For the one-factor CFA for the AOCS, the RMSEA is high at .094. However, the RMR, GFI, NFI and CFI all indicate excellent model fit at .056, .912, .938 and .946 respectively. AGFI is just below .9 at .872 and thus closely approaches the prescribed level of acceptable fit. The one-

factor model for the AOCS is therefore accepted. Even though it does not represent an ideal fit, with almost all of the fit indices indicating acceptable model fit, one can accept that the one-factor model of the AOCS, without any modifications, is a statistically sound and practical instrument to measure OC for this sample.

In order to test the fit of various hypothesised models that describe the relationship between IS, OS and SAW and the resultant impact/effect on WE and OC, the researcher applied structural equation modelling (SEM). The SEM was run with the models that show the best fit option on each of the five measurement instruments. As motivated in the previous discussion, the following models were selected to explore the research questions:

- For the HSS, three-factor CFA Model 5 was selected
- For OSVS, one-factor CFA Model 4 was selected
- For SAW, four-factor CFA Model 2 was selected
- For UWES a three-factor model was confirmed.
- For the AOCS, a one-factor model was confirmed in line with previous research findings.

The results of the SEM as well as the ANOVA done on certain demographic variables impacting on the relationship between IS, OS and SAW, are discussed next.

3 STRUCTURAL EQUATION MODELLING

In order to test the fit of various models that describe the relationship between IS, OS and SAW, the researcher applied *structural equation modelling*. Structural equation modelling (SEM) is a methodology for representing, estimating, and testing a network of complex relationships between measured variables and latent constructs (Craig, n.d.; Suhr, n.d.). Though there are many ways to describe SEM, it is most commonly thought of as a hybrid between some form of analysis of variance (ANOVA)/regression and some form of factor analysis (Barrett, 2007; Craig, n.d.). It is therefore a technique that can examine a series of dependence relationships simultaneously (Hair, Black, Babin & Anderson, 2010). It is known by many other names: co-

variance structure analysis, latent variable analysis and sometimes it is even identified by the software packages used to conduct the analyses – i.e. LISREL or AMOS (Hair, et. al., 2010). SEM is comprised of a number of other analysis methods (Hill & Lewicki, 2007). The nature of each study dictates which methods will be selected for data analysis. According to Hair et. al. (2010), although SEM models can be tested in different ways, all structural equation models have three characteristics in common:

- 1) Multiple interrelated dependence relationships are determined simultaneously
- 2) Unobserved or latent variables are represented and potential measurement errors in the estimation process are taken into account
- 3) A model is defined to explain the entire set of relationships

The research models as hypothesised in Chapter 1 were run through SEM. Standardised regression weights were used to measure the relative importance/strength of each of the hypothesised relationships. *Path analysis* was used to provide estimates for each relationship. These estimates are interpreted like regression coefficients. However, the equations are not kept separate. All relationships are computed at the same time. With estimates for each path, an interpretation can be made about each relationship represented in the research model (Leedy & Omrod, 2010).

The constructs measured in this study were IS, OS, SAW, WE and OC. These constructs were measured through different measurement instruments – HSS, OSVS, SAW, UWES and AOCS. Two separate recursive structural equation models were tested. An overview of the structure of these models is illustrated in Figures 39 and 40 respectively.

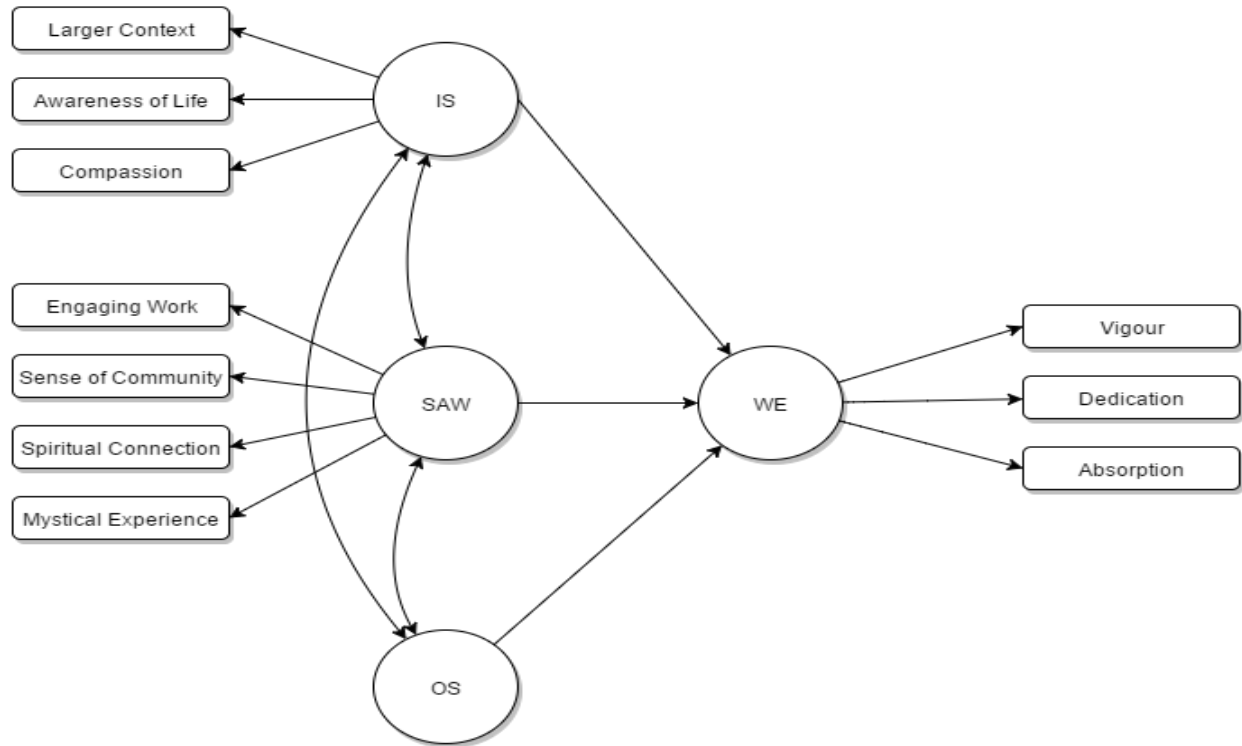


Figure 39: Spirituality constructs and work engagement

Figure 39 represents an overview of the recursive structural equation model of the postulated relationships between individual spirituality (IS), organisational spirituality (OS) and spirit at work (SAW) and the resultant impact on work engagement (WE). This is model 1. Individual spirituality is represented as a three-factor construct, organisational spirituality as a one-factor construct, spirit at work as a four-factor construct and work engagement as a three-factor construct as confirmed by the CFA's run on the HSS, OSVS, SAW and UWES instruments.

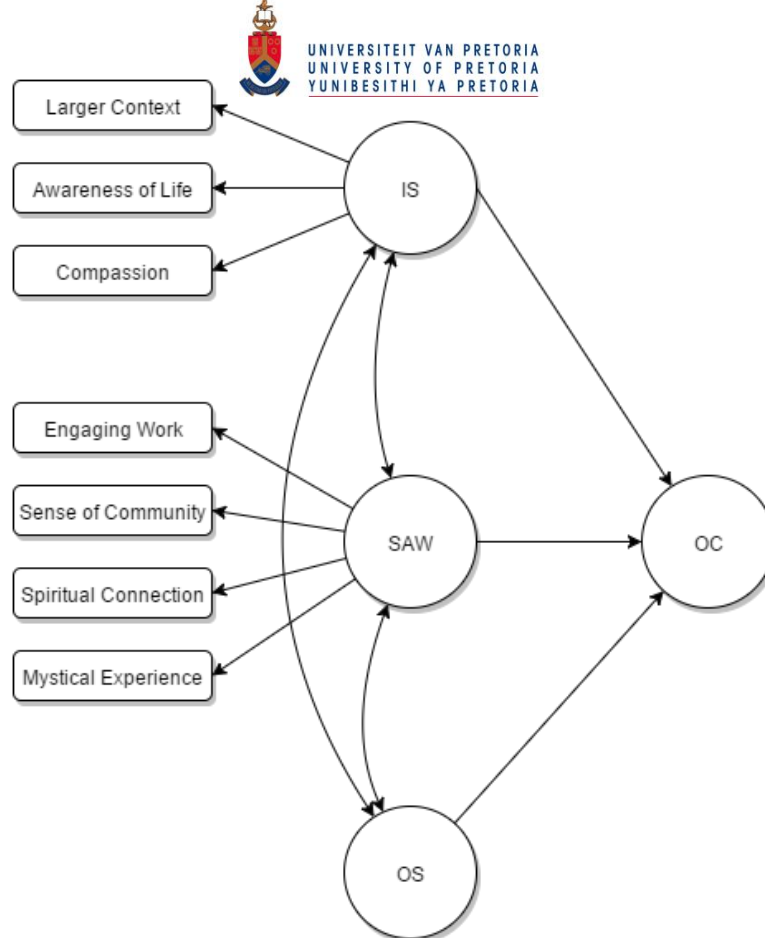


Figure 40: Spirituality constructs and organisational commitment

Figure 40 represents an overview of the recursive structural equation model of the postulated relationships between individual spirituality (IS), organisational spirituality (OS) and spirit at work (SAW) and the resultant impact on organisational commitment (OC). This is model 2. In Figure 40, individual spirituality is represented as a three-factor construct, organisational spirituality as a one-factor construct, spirit at work as a four-factor construct and organisational commitment as a one-factor construct as confirmed by the CFA's run on the HSS, OSVS, SAW and the AOCS.

From the SEM models, it was possible to estimate the strength of each of the relationships in the model and to assess how well the data actually fit the model. Standardised regression weights were used to measure the relative importance/strength of each of the hypothesised relationships. SEM provides no straightforward tests to determine model fit. For this reason, the best strategy for evaluating model fit is to examine multiple fit indices. There are two broad categories of fit indices: (1) absolute fit indices and (2) incremental/relative fit indices.

With regards to which indices should be reported, it is not necessary or realistic to include every index included in the program's output as it will burden both a reader and a reviewer (Moss, 2009). While there are no golden rules for assessment of model fit, reporting a variety of indices is still necessary (Crowley and Fan 1997) because different indices reflect different aspects of model fit. Although the chi-square has many problems associated with it, especially when it comes to larger samples, researchers agree that it is still essential that this statistic, along with its degrees of freedom and associated p-value, should be reported at all times (Kline, 2005; Hayduk et al, 2007). Hair et.al. (2010) state that using three to four fit indices usually provide adequate evidence of model fit. The researcher should aim to report at least one absolute index and one incremental/relative index in addition to the chi-square value, the associated degrees of freedom and the p-value.

Thus in an attempt to not over-burden the reader, whilst at the same time reporting indices that reflect different aspects of each model, three indices will be reported, from each type of fit index, to determine model fit for models 1 and 2. The absolute fit indices that will be reported are: the chi-square to degrees of freedom (df) ratio (χ^2/df); also called the relative chi-square (Suhr, n.d.) or normed chi-square (Moss, 2009), the root mean square error approximation (RMSEA), root mean square residual (RMR) and the goodness-of-fit (GFI) statistic as these are the most preferred and popularly reported absolute fit indices.

The chi-square statistic nearly always rejects the model when large samples are used (Bentler and Bonnet, 1980; Hox & Bechger, 1998; Jöreskog and Sörbom, 1993). For the relative/normed chi-square, the criterion for acceptance varies across researchers, ranging from less than 2 (Tabachnick and Fidell, 2007; Ullman, 2001) to less than 5; $\chi^2 / df \leq 5$ (Marsh & Hocevar, 1985; Schumacker & Lomax, 2004; Wheaton, Muthen, Alwin & Summers, 1977). The cut-off value for acceptable model fit with the RMSEA ranges between .06 (Hu and Bentler, 1999) and .07 (Steiger, 2007). A value between .08 and .10 is considered to provide a mediocre fit (MacCallum et. al., 1996). According to most researchers, RMR should be less than .08 (Browne & Cudeck, 1993; Hu & Bentler, 1998) and ideally less than .05 (Steiger, 1990). The value of the GFI ranges from 0 to 1 with larger samples increasing its value (Hooper et al., 2008). A cut-off

point of .9 is recommended for the GFI (Hooper, Coughlan & Mullen, 2008; Hu and Bentler, 1999).

The incremental/relative fit indices that will be reported are: the normed-fit index (NFI), Tucker Lewis index (TLI) or non-normed fit index (NNFI) and the comparative fit index (CFI). Values for the normed fit Index (NFI) statistic range between 0 and 1 (Hair et.al., 2010). A cut-off value of .9 is recommended by Bentler and Bonnet (1980). However, Hu and Bentler (1999) recommend that the cut-off criteria should be .95. Hu and Bentler (1999) also suggest .95 as the cut-off threshold for the TLI/NNFI. However, cut-off thresholds as low as .8 have been accepted (Hooper et.al., 2008). Although a cut-off criterion of .9 was initially proposed for the CFI, Hu and Bentler (1999) highlighted that to ensure mis-specified models were not accepted, the cut-off threshold should be raised to .95.

3.1 ASSESSING STRUCTURAL MODEL VALIDITY – MODEL 1

3.1.1 Fit Indices for model 1

A chi-square of 8311.2 (df = 2465, $p < .0001$) is obtained from running the SEM for model 1 (see Figure 39 on page 242). The relative chi-square (CMIN/DF) for model 1 is 3.4, which, according to Marsh and Hocevar (1985); Schumacker & Lomax, (2004); and Wheaton et al. (1977) is indicative of good model fit. Table 88 provides a summary of the fit indices for model 1.

Table 88: Fit Indices for model 1 (N = 787)

Absolute Fit Indices		
RMSEA	RMR	GFI
.056	.065	.730
Incremental/Relative Fit Indices		
NFI	NNFI (TLI)	CFI
.793	.839	.844

With regards to the absolute fit indices for model 1, the RMSEA is .056 and the RMR is below .08 at .065, indicating that the data fits the model adequately. The GFI is a bit too low at .730 and does not indicate a good model fit. In this particular case, it is assumed that both the relatively small sample size and the number of parameters in model 1 could have led to a lower GFI value.

With regards to the incremental/relative fit indices, the NFI is .793 indicating that the data do not fit the model well. However, the NNFI (TLI) is .839 indicating that the data shows an adequate fit with the model. The CFI is just below .9 at .844.

Table 89 provides the regression weights for IS, OS, SAW with WE.

Table 89: Regression weights for model 1 (N = 787)

	Estimate	S.E.	C.R. (z-value)	P-value
WE <--- IS	-.005	.034	-.160	.873
WE <--- SAW	.777	.059	13.144	***
WE <--- OS	-.206	.030	-6.959	***
*** indicates a P-value < .05				

In SEM regression weights are interpreted in the same way as in regression e.g. $WE \leftarrow SAW$ -regression weight of 0.777 indicates that when SAW increases by 1 unit, WE increases by 0.777. The regression weights in Table 89 indicate significant relationships between SAW and WE as well as between OS and WE. The p-values for the relationship between OS and WE as well as for the relationship between SAW and WE are <.05, indicating that the relationships are statistically significant. The regression weight between OS and WE indicates a significant negative relationship between the two variables. However, with regards to the relationship between IS and WE, a significant relationship was not found as the p-value for this relationship was >.05 at .873.

The standardized regression weights for model 1 are provided in Table 90.

Table 90: Standardised regression weights for model 1 (N = 787)

	Estimate
WE <--- IS	-.004
WE <--- SAW	1.128
WE <--- OS	-.257

The standardised regression weights for these variables indicate a positive relationship between SAW and WE and a negative relationship between OS and WE, with almost no relationship between IS and WE. Thus, it can be concluded that SAW is the strongest predictor of WE. There seems to be a relatively strong negative relationship between OS and WE. This finding is unexpected as it implies that higher OS would lead to less work engagement. From a theoretical and empirical perspective, autonomy in work usually leads to greater WE (Albrecht, 2010; Bakker & Demerouti, 2008; De Lange et al., 2008; Lawler & Worley, 2006). It was decided to run a separate model only looking at the correlations between OS and WE, to determine if the result would be different if the impact of both IS and SAW on WE were removed from the equation. This analysis is reported in section 1.3

The weak relationship between IS and WE is also unexpected. From a theoretical perspective, strong relationships have been found between elements of IS and WE in other studies. For example, Kolodinsky et al. (2008) found a positive correlation between spirituality and work engagement and Rothman and Buys (2011) found positive correlations between meaning (a dimension of IS) and work engagement. Lastly, Roof (2015) provided empirical support for spirituality as a predictor of higher work engagement. However, from these results, it appears as if IS does not impact on WE as the standardised regression weight value is negligible. It is postulated that perhaps the strong correlations between OS and SAW and their resultant impact on WE, are negating the impact of IS on WE, making it look like the impact of IS on WE is negligible. It was decided to also run a separate model only looking at the correlations between IS and WE, to determine if the result would be different if the impact of both OS and SAW on WE were removed from the equation. This analysis is reported in section 1.2.

3.1.2 Co-variances and correlations between IS, OS and SAW

Co-variances are very difficult to interpret as they depend on the “unit” of measurement. For this reason, the co-variance statistics are reported instead in order to identify significant associations/correlations which are standardised between -1 and 1. Table 91 provides the co-variance statistics for IS, OS and SAW in model 1.

Table 91: Co-variance statistics for model 1 (N = 787)

	Estimate	S.E.	C.R. (z-value)	P-value
IS <--> SAW	.146	.017	8.621	***
IS <--> OS	.123	.014	8.567	***
SAW <--> OS	.392	.032	12.391	***
*** indicates a P-value < .05				

The co-variance statistics for the three variables IS, OS and SAW indicate significant relationships between all three variables. From Table 91, it is evident that all three variables are positively related. All the p-values for the different co-variance statistics are <.05, indicating that all the relationships are significant. Table 92 provides a summary of the correlation statistics for model 1.

Table 92: Correlation statistics for model 1 (N = 787)

	Estimate
IS <--> SAW	.486
IS <--> OS	.479
SAW <--> OS	.750

The correlation statistics in Table 92 confirm that there is a strong positive correlation between IS and SAW as well as between IS and OS as the estimates are above .40. A strong positive relationship is indicated with an estimate between .40 and .69 (Dancey & Reidy, 2004). There is a very strong positive relationship between SAW and OS as the estimate is above .70 and an estimate above .70 indicates a very strong relationship (Dancey & Reidy, 2004).

The very strong correlation between SAW and OS seems to contradict the previous finding of a negative correlation between OS and WE. The results in table 92 indicate that an increase in SAW would lead to an increase in WE. If there is a strong positive correlation between SAW and OS, then an increase in OS should therefore also technically lead to an increase in WE. It is therefore postulated that perhaps the correlation between OS and WE is positive (Table 90), but that the strong correlation between SAW and OS could be negating the impact of OS on WE, making it look like there is a negative correlation between these two variables (Table 89). The impact of SAW could thus be overshadowing the impact of OS. It was decided to run a separate model only looking at the correlations between OS and WE, to determine if the result would be different if the impact of SAW on WE was removed from the equation. This analysis is reported in section 1.3

3.2 ASSESSING STRUCTURAL MODEL VALIDITY – MODEL 1A

As mentioned, the weak relationship between IS and WE was unexpected since strong relationships have been found between elements of IS and WE in other studies. It was therefore decided to test the relationship between IS and WE again. Model 1A is a revised structural model to re-examine the relationship between IS and WE. OS and SAW are removed from the model to eliminate their impact on WE and to determine if a positive relationship can be established between IS and WE. Figure 41 illustrates an overview of the structural model that was tested.

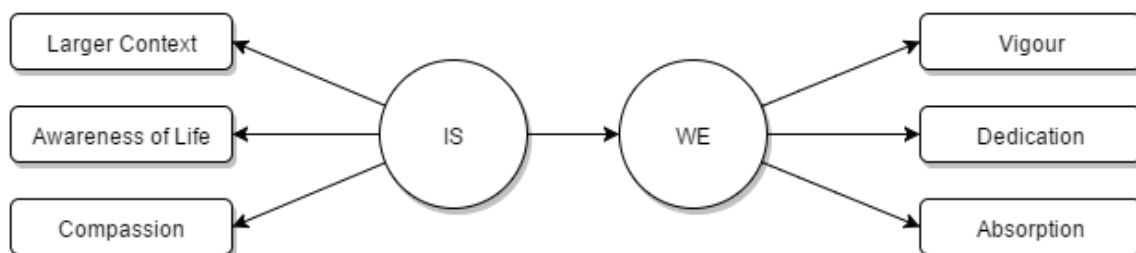


Figure 41: Model 1A – Impact of individual spirituality (IS) on work engagement (WE)

3.2.1 Fit indices for model 1A

A chi-square of 2332.3 (df = 553, $p < .0001$) is obtained from running the SEM for model 1A. The relative chi-square (CMIN/DF) for model 1A is 4.2, which, according to Marsh and Hocevar, (1985) and Schumacker & Lomax, (2004) is indicative of good model fit (≤ 5). Table 93 provides a summary of the fit indices that are investigated for model 1A.

Table 93: Fit Indices for model 1A (N = 787)

Absolute Fit Indices		
RMSEA	RMR	GFI
.065	.048	.831
Incremental/Relative Fit Indices		
NFI	NNFI (TLI)	CFI
.825	.850	.861

With regards to the absolute fit indices for model 1A, the RMSEA is .065 and the RMR is .048, both indicating that the data fit the model. The GFI is a bit lower than ideal at .831, but is moving closer to the .9 threshold. Most of the fit indices are within the prescribed ranges or close to it and the data therefore show an acceptable practical fit to the proposed model. For this reason, it is concluded that model 1A provides an acceptable description of the relationship between IS and WE.

Table 94 provides a summary of the regression weights calculated for model 1A.

Table 94: Regression weights for model 1A (N = 787)

	Estimate	S.E.	C.R.	P	Label
WE <--- IS	.606	.076	8.019	***	
*** indicates a P-value < .05					

Table 94 indicates a strong positive and statistically significant relationship between IS and WE. It therefore appears as if the strong relationship between OS and SAW and the resultant impact

on WE may be overshadowing the impact of IS on WE as postulated. The standardised regression weight for this relationship is .424; confirming a strong relationship between IS and WE.

3.3 ASSESSING STRUCTURAL MODEL VALIDITY – MODEL 1B

Model 1B is a revised structural model to re-examine the relationship between OS and WE. SAW and IS are removed from the model to eliminate their impact on WE and to determine if a positive relationship can be established between OS and WE as the significant relationship between SAW and OS contradicts a negative relationship between OS and WE. Figure 42 illustrates an overview of the structural model that was tested.

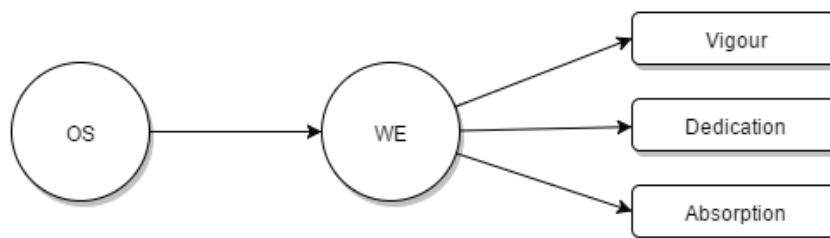


Figure 42: Model 1B – Impact of organisational spirituality (OS) on work engagement (WE)

3.3.1 Fit Indices for Model 1B

A chi-square of 2697.7 ($df = 622$, $p < .0001$) is obtained from running the SEM for model 1B. The relative chi-square (CMIN/DF) for model 1A is 4.3, which, according to Marsh and Hocevar, (1985); Schumacker & Lomax, (2004)) is indicative of good model fit (≤ 5). Table 95 provides a summary of the fit indices that are investigated for model 1B.

Table 95: Fit Indices for model 1B (N = 787)

Absolute Fit Indices		
RMSEA	RMR	GFI
.066	.049	.815

Incremental/Relative Fit Indices		
NFI	NNFI (TLI)	CFI
.873	.892	.899

With regards to the absolute fit indices for model 1B, the RMSEA is .066 and the RMR is .049, both indicating that the data fit the model. The GFI is a bit lower than ideal at .815, but is moving closer to the .9 threshold. Most of the fit indices are within the prescribed ranges or close to it and the data therefore show an acceptable practical fit to the proposed model. For this reason, it is concluded that model 1B provides an acceptable description of the relationship between OS and WE.

Table 96 provides a summary of the regression weights calculated for model 1B.

Table 96: Regression weights for model 1B (N = 787)

	Estimate	S.E.	C.R.	P	Label
WE <--- OS	.474	.042	11.223	***	
*** indicates a P-value < .05					

Table 94 indicates a strong positive and statistically significant relationship between OS and WE. It therefore appears as if the strong impact of SAW may be overshadowing the impact of OS on WE as postulated. The standardised regression weight for this relationship is .586; confirming a strong relationship between OS and WE.

3.4 ASSESSING STRUCTURAL MODEL VALIDITY – MODEL 2

The next step was to determine the impact of IS, OS and SAW on OC – in other words, run model 2 (see Figure 40 on page 243) through a SEM.

3.4.1 Fit Indices for model 2

A chi-square of 7070.3 (degrees of freedom (df) = 2128, $p < .0001$) is obtained from running the SEM for model 2. The relative chi-square (CMIN/DF) for model 1 is 3.3, which indicates that the data fit the model. Table 97 provides a summary of the fit indices that were investigated for model 2.

Table 97: Fit Indices for model 2 (N = 787)

Absolute Fit Indices		
RMSEA	RMR	GFI
.055	.068	.746
Incremental/Relative Fit Indices		
NFI	NNFI (TLI)	CFI
.809	.853	.858

With regards to the absolute fit indices for model 2, the RMSEA is .055 and the RMR is below .08 at .068, indicating that the data fit the model. The GFI is a bit too low at .746 and does not indicate acceptable model fit. Again, it is assumed that the relatively small sample size led to a lower than acceptable GFI value.

All three incremental/relative fit indices, are close to the .9 threshold with the NFI at .809 which is a bit too low to indicate model fit. However, the NNFI (TLI) and CFI are approaching acceptable fit at .853 and .858 respectively.

Although not all the indices are within the prescribed ranges, the data still show a reasonable fit to the proposed model. Based on the fit indices that indicate acceptable model fit, it is concluded that model 2 describes an acceptable model for the relationships between IS, OS, SAW and the resultant impact on OC.

The next step was to evaluate the relationships between constructs found in model 2. Table 98 provides regression weights for IS, OS, SAW and OC.

Table 98: Regression weights for model 2 (N = 787)

	Estimate	S.E.	C.R.	P
OC <--- IS	-.245	.046	-5.331	***
OC <--- SAW	.369	.037	10.049	***
OC <--- OS	.331	.038	8.767	***

Studying the regression weights in Table 96, significant relationships between SAW and OC, between OS and OC as well as between IS and OC are found. Looking at the p-values for these relationships, it seems there are significant relationships between all three variables and OC as the p-values for all of these relationships are <.05.

The standardized regression weights for model 2 are provided in Table 99.

Table 99: Standardised regression weights for model 2 (N = 767)

	Estimate
OC <--- IS	-.177
OC <--- SAW	.546
OC <--- OS	.423

The standardised regression weights for these variables indicate a positive relationship between SAW and OC as well as between OS and OC, and a negative relationship between IS and OC. It can be concluded that SAW is the strongest predictor of OC. There is a significant relationship between these two variables. As SAW increases, OC also increases. There is also a significant positive relationship between OS and OC with OC increasing as OS increases. There seems to be a significant negative relationship between IS and OC; with an increase in IS leading to a decrease in OC. To a certain extent this result was expected, since higher individual spirituality would probably result in higher commitment to one's own spiritual purpose and not necessarily to one's organisation. The fact that for OC, there is a relationship between IS and OC though, made the researcher question whether there might be a significant relationship between IS and WE as well, but that perhaps the significant relationship between

SAW and WE as well as between OS and WE are overshadowing the effect of IS, since the relationships between SAW and WE in particular are very strong.

3.4.2 Co-variances and correlations between IS, OS and SAW

Co-variances are very difficult to interpret as they depend on the “unit” of measurement. For this reason, the co-variance statistics are reported instead in order to identify significant associations/correlations which are standardised between -1 and 1. Table 100 provides the co-variance statistics for model 2.

Table 100: Co-variance statistics for model 2 (N = 767)

	Estimate	S.E.	C.R.	P
IS <--> SAW	.149	.017	8.690	***
IS <--> OS	.124	.014	8.571	***
SAW <--> OS	.407	.033	12.529	***

The co-variance statistics for the three variables IS, OS and SAW again indicate significant associations between all three variables. From Table 100, it is evident that all three variables are positively related. All the p-values for the different co-variance statistics are <.05, indicating that all the associations are significant. Table 101 provides a summary of the correlation statistics for model 2.

Table 101: Correlation statistics for model 2 (N = 767)

	Estimate
IS <--> SAW	.498
IS <--> OS	.478
SAW <--> OS	.769

The correlation statistics in Table 101 confirm that there is a very strong positive relationship between SAW and OS as the estimate is above .70 which indicates a very strong positive relationship (Dancey & Reidy, 2004). There is a strong positive correlation between IS and

SAW as well as between IS and OS as the estimate is above .40. A strong positive relationship is indicated with an estimate between .40 and .69 (Dancey & Reidy, 2004).

Comparing the correlation statistics for model 1 and 2, in both models, strong positive correlations are found between IS and SAW, between IS and OS and between SAW and OS; with the strongest correlation between SAW and OS.

4 ANALYSIS OF VARIANCE (ANOVA)

Lastly, analysis of variance (ANOVA) was used to explore the relationship between IS, OS and SAW with demographic-type variables. The respective means of IS, OS and SAW according to 15 demographic variables that could potentially affect the three main constructs were analysed using ANOVA (see Appendix G for a breakdown of the 15 demographic items). An ANOVA is used to look for differences among three or more means by comparing the variances both within and across groups (Leedy & Omrod, 2010). Differences between demographic groups are based on the F-statistics and p-values <.05 are regarded as significant. If significant results are obtained, the test is followed up with post-hoc pairwise Least Significant Difference (LSD) t-tests comparing each pair of means to identify which demographic groups differ from each other.

4.1 ANOVA OF INDIVIDUAL SPIRITUALITY WITH DEMOGRAPHIC VARIABLES

Table 102 provides a summary of the ANOVA procedure that was run on IS and the 15 demographic variables. Demographic variables that show significant F-statistics and p-values are highlighted in yellow.

Table 102: Summary of ANOVA procedure run on IS and 15 demographic variables (N = 759)

Item nr.	Variable measured	DF	Mean Square	F Value	Pr > F
F1	Organisational support	4	0.073	0.46	0.7617
F9	Recognition & reward	4	0.148	0.95	0.4368
F10	Opportunities for advancement	4	0.128	0.82	0.5143
F12	Access to information	4	0.098	0.63	0.6420
F13	Involvement in decision-making	4	0.379	2.43	0.0468
F16	Supervisor support	4	0.633	4.05	0.0030
I3	Gender	1	6.903	44.12	<.0001
I4	Ethnicity	1	0.714	4.56	0.0331
I5	Age	3	0.287	1.84	0.1393
I7	Qualifications	2	0.163	1.04	0.3528
I9a	Substantial career change	1	0.036	0.23	0.6297
I10	Career satisfaction	4	0.251	1.61	0.1707
I11	Happiness at work	4	0.201	1.29	0.2732
I14	Religious orientation	2	0.209	1.34	0.2634
I15	Strength of religious convictions	4	1.990	12.72	<.0001

From Table 102 it is evident that the only demographic variables that have statistically different means with respect to IS are: involvement in decision-making (F13), supervisor support (F16), gender (I3), ethnicity (I4) and strength of religious convictions (I15). The ANOVA post-hoc test results for demographic variables showing statistically significant differences with IS are discussed below. The results for each variable are presented in a table. Means with the same t-Grouping letter are not significantly different. The t-test results for the pairwise means comparisons of IS scores for involvement in decision-making (F13) are presented in Table 103.

Table 103: t-test results for IS and involvement in decision-making (F13) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
F13	Involvement in decision-making	4	2.43	0.0468	Strongly disagree	236	4.2	A
					Strongly agree	52	4.1	A B
					Disagree	216	4.0	B C
					Agree	110	3.9	C
					Neither	145	3.9	C

With regards to involvement in decision-making there are 3 overlapping groups – A respondents who feel very strongly (either positively or negatively) about their involvement in decision-making in the organisation, B respondents who strongly agree or who disagree and C respondents who feel less strongly about it. The IS scores of respondents who agree very strongly or strongly about their involvement in decision-making in the organisation, tend to be higher than when they either just agree, disagree or have a neutral view of their involvement in decision-making in the organisation.

The t-test results for the pairwise means comparisons of IS scores for supervisor support (F16) are presented in Table 104.

Table 104: t-test results for IS and supervisor support (F16) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
F16	Supervisor support	4	4.05	0.0030	Strongly agree	252	4.2	A
					Agree	291	4.0	B
					Neither	134	3.9	B
					Disagree	48	3.9	B
					Strongly disagree	34	3.7	C

With regards to supervisor support, the t-tests identify three significant differences – A respondents who very strongly agree that their supervisors support them, B respondents who very strongly disagree that their supervisors support them and C respondents with less extreme opinions in the middle of the two extreme poles. The higher the IS means, the more the

respondents agreed that their supervisors support them. It seems therefore, that supervisor support is associated with an individual's level of individual spirituality.

The t-test results for the pairwise means comparisons of IS scores of gender (I3) are presented in Table 105.

Table 105: t-test results for IS and gender (I3) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
I3	Gender	1	44.12	<.0001	Female	258	4.2	A
					Male	501	3.9	B

With regards to gender, the t-test revealed a statistical significance between the IS levels of males (B respondents) and females (A respondents). For this sample, females have significantly higher IS levels than males on average. This is congruent with what was found in other studies (Bryant, 2007; Hammermeister, Flint, El-Alayli, Ridnour, & Peterson, 2005; Simpson, Cloud, Newman & Fuqua, 2008; Van der Walt & De Klerk, 2015).

The t-test results for the pairwise means comparisons of IS scores of ethnicity (I4) are presented in Table 106.

Table 106: t-test results for IS and ethnicity (I4) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
I4	Ethnicity	1	4.56	0.0331	Not White	108	4.1	A
					White	651	4.0	B

With regards to ethnicity, the t-test results revealed a statistically significant difference between the IS levels of White/Caucasian respondents (B respondents) and non-White respondents (A respondents). Non-White respondents (i.e. Black, Coloured and Indian) have statistically significantly higher IS scores than White respondents. This is congruent with other research findings that found that Africans and other non-whites tend to be more spiritual than Caucasians

(Levine, Yoo, Aviv, Ewing & Au, 2007; Taylor, Chatters & Jackson, 2007; Van der Walt & De Klerk, 2015).

The t-test results for the pairwise means comparisons of IS scores of strength of religious convictions are presented in Table 107.

Table 107: t-test results for IS and strength of religious convictions (I15) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
I15	Strength of religious convictions	4	12.72	<.0001	Very strong	237	4.2	A
					Strong	212	4.0	B
					Moderate	204	3.9	B C
					Weak	39	3.9	C
					Very weak	67	3.7	D

When it comes to strength of religious convictions the t-tests identify four distinct groups which differ significantly – A respondents with very strong religious convictions, B respondents with moderate to strong religious convictions C respondents with moderate to weak religious convictions and D respondents with very weak religious convictions. Respondents with moderate religious convictions do not differ significantly from those with strong or weak convictions. From Table 107, it is clear that the stronger respondents' religious convictions are, the higher their IS Means are. Therefore, those with stronger religious convictions, tend to have significantly higher levels of individual spirituality. These findings are congruent with Van der Walt and De Klerk's (2015) findings.

4.2 ANOVA OF ORGANISATIONAL SPIRITUALITY WITH DEMOGRAPHIC VARIABLES

Table 108 provides a summary of the ANOVA procedure that was run on OS and 15 demographic variables. Demographic variables that show significant F-statistics and p-values are highlighted in yellow.

Table 108: Summary of ANOVA procedure run on OS and 15 demographic variables (N = 759)

Item nr.	Variable measured	DF	Mean Square	F Value	Pr > F
F1	Organisational support	4	8.08627553	35.55	<.0001
F9	Recognition & reward	4	1.28247781	5.64	0.0002
F10	Opportunities for advancement	4	0.40397010	1.78	0.1318
F12	Access to information	4	0.06094073	0.27	0.8987
F13	Involvement in decision-making	4	0.98705475	4.34	0.0018
F16	Supervisor support	4	0.52541637	2.31	0.0565
I3	Gender	1	3.02777265	13.31	0.0003
I4	Ethnicity	1	0.26170523	1.15	0.2838
I5	Age	3	0.21125300	0.93	0.4264
I7	Qualifications	2	0.01697932	0.07	0.9281
I9a	Substantial career change	1	0.83558083	3.67	0.0557
I10	Career satisfaction	4	0.25713976	1.13	0.3410
I11	Happiness at work	4	0.14548363	0.64	0.6344
I14	Religious orientation	2	1.16433786	5.12	0.0062
I15	Strength of religious convictions	4	0.41983074	1.85	0.1183

From Table 108 it is evident that the demographic variables with means that have statistically significant differences with respect to OS are: organisational support (F1), recognition and reward (F9), involvement in decision-making (F13), gender (I3) and religious orientation (I14). These variables all have a large F-statistic and a p-value <.05. The results of the ANOVA results per demographic variable showing statistically significant differences with OS are discussed below. The results for each variable are presented in a table. Means with the same t-Grouping letter are not significantly different. The t-test results for the pairwise means comparisons of OS scores for organisational support (F1) are presented in Table 109.

Table 109: t-test results for OS and organisational support (F1) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
F1	Organisational support	4	35.55	<.0001	Strongly agree	216	4.2	A
					Agree	309	3.8	B
					Neither	130	3.2	C
					Disagree	61	2.7	D
					Strongly disagree	43	2.0	E

When it comes to organisational support, the t-tests identify that all five groups are significantly different – A respondents feel strongly that their organisations support them, B respondents have moderately strong views about their organisations' level of support for them, C respondents are neutral about whether their organisations support them or not, D respondents have moderately weak views about their organisations' lack of support for them and E respondents feel strongly that their organisations do not support them. From Table 109, it is evident that the more respondents feel that their organisations support them, the higher their OS score will be. Thus, it seems that organisations that support their employees might see higher levels of OS.

The t-test results for the pairwise means comparisons of OS scores for recognition and reward (F9) are presented in Table 110.

Table 110: t-test results for OS and recognition and reward (F9) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
F9	Recognition and reward	4	5.64	0.0002	Strongly agree	189	4.2	A
					Agree	342	3.7	B
					Neither	132	3.3	C
					Disagree	58	2.7	D
					Strongly disagree	38	2.3	E

When it comes to recognition and rewards for good work, the t-tests identify that all five groups are significantly different – A respondents feel strongly that their organisations recognise and

reward them for good work, B respondents have moderately strong views about the fact that their organisations recognise and reward them for good work, C respondents are neutral about whether their organisations recognise and reward them for good work, D respondents have moderately weak views about the lack of recognition and reward they receive for good work and E respondents feel strongly that their organisations do not recognise and reward them for good work. From Table 110 it is evident that the more respondents feel that they are recognised and rewarded for good work by their organisations, the higher their OS score will be. Thus, it seems that organisations that recognise and reward employees for good work might see higher levels of OS.

The t-test results for the pairwise means comparisons of OS scores for involvement in decision-making (F13) are presented in Table 111.

Table 111: t-test results for OS and involvement in decision-making (F13) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
F13	Involvement in decision-making	4	4.34	0.0018	Strongly disagree	236	4.0	A
					Disagree	216	3.8	B
					Neither	145	3.4	C
					Agree	110	3.1	D
					Strongly agree	52	2.9	E

When it comes to involvement in decision-making in the organisation, again the t-tests identify that all five groups are significantly different – A respondents feel strongly that their organisations involve them in decision-making, B respondents have moderately strong views about their level of involvement in decision-making, C respondents are neutral about whether their organisations involve them in decision-making, D respondents have moderately weak views about their lack of involvement in decision-making and E respondents feel strongly that their organisations do not involve them in decision-making. From Table 111 it is evident that the more respondents feel that their organisations involve them in decision-making, the higher

their OS scores will be. Thus, it seems that organisations that involve employees in decision-making might see higher levels of OS.

The t-test results for the pairwise means comparisons of OS scores of gender (I3) are presented in Table 112.

Table 112: t-test results for OS and gender (I3) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
I3	Gender	1	13.31	0.0003	Female	258	3.7	A
					Male	501	3.6	B

With regards to gender, the t-test reveals a statistically significant difference between the OS levels of males (B respondents) and females (A respondents). Females tend to report slightly higher OS levels than males and therefore tend to experience slightly more organisational spirituality than males.

The t-test results for the pairwise means comparisons of OS scores of religious orientation (I14) are presented in Table 113.

Table 113: t-test results for OS and religious orientation (I14) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
I14	Religious orientation	2	5.12	0.0062	Other religions	111	3.7	A
					Christians	544	3.7	A
					Atheists/Pantheists/Agnostics	104	3.3	B

With regards to religious orientation, the t-tests identify only two significant groupings – religious respondents (A respondents) and respondents who are either atheistic, pantheistic or agnostic (in other words, not religious – B respondents). As is evident from Table 113, religious respondents report slightly higher levels of OS than non-religious respondents. Thus, it seems

that religious respondents experience slightly more organisational spirituality than non-religious respondents.

4.3 ANOVA OF SPIRIT AT WORK WITH DEMOGRAPHIC VARIABLES

Table 114 provides a summary of the ANOVA procedure that was run on SAW and 15 demographic variables. Demographic variables that had significant F-statistics and p-values are highlighted in yellow.

Table 114: Summary of ANOVA procedure run on SAW and 15 demographic variables (N = 759)

Item nr.	Variable measured	DF	Mean Square	F Value	Pr > F
F1	Organisational support	4	1.19430546	4.36	0.0017
F9	Recognition & reward	4	0.20782483	0.76	0.5519
F10	Opportunities for advancement	4	0.66119269	2.42	0.0475
F12	Access to information	4	0.06119811	0.22	0.9252
F13	Involvement in decision-making	4	0.40978153	1.50	0.2011
F16	Supervisor support	4	0.45738855	1.67	0.1547
I3	Gender	1	0.77138131	2.82	0.0936
I4	Ethnicity	1	0.03106229	0.11	0.7363
I5	Age	3	0.27352005	1.00	0.3925
I7	Qualifications	2	0.07354822	0.27	0.7644
I9a	Substantial career change	1	1.35727916	4.96	0.0263
I10	Career satisfaction	4	1.56753831	5.73	0.0002
I11	Happiness at work	4	4.96942913	18.16	<.0001
I14	Religious orientation	2	3.52602800	12.89	<.0001
I15	Strength of religious convictions	4	2.98864848	10.92	<.0001

From Table 114 it is evident that the demographic variables that have statistically different SAW means are: organisational support (F1), opportunities for advancement (F10), substantial career change (I9a), career satisfaction (I10), happiness at work (I11), religious orientation (I14) and strength of religious orientation (I15). These variables all had a large F-statistic and a p-value $< .05$. The results of the ANOVA results per demographic variable showing statistically significant differences with SAW are discussed below. The results for each variable are presented in a table. Means with the same t-Grouping letter are not significantly different. The t-test results for the mean SAW scores and organisational support (F1) are presented in Table 115.

Table 115: t-test results for SAW and organisational support (F1) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
F1	Organisational support	4	4.36	0.0017	Strongly agree	216	4.2	A
					Agree	309	3.8	B
					Neither	130	3.4	C
					Disagree	61	3.0	D
					Strongly disagree	43	2.6	E

When it comes to organisational support, the t-tests identify that all five groups are significantly different – A respondents feel strongly that their organisations support them, B respondents have moderately strong views about their organisations' level of support for them, C respondents are neutral about whether their organisations support them, D respondents have moderately weak views about their organisations' lack of support for them and E respondents feel strongly that their organisations do not support them. From Table 115 it is evident that the more respondents feel that their organisations support them, the higher their SAW scores will be. Thus, it seems that organisations that support their employees might see higher levels of SAW.

The t-test results for the pairwise means comparisons of SAW scores and opportunities for advancement (F10) are presented in Table 116.

Table 116: t-test results for SAW and opportunities for advancement (F10) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
F10	Opportunities for advancement	4	2.42	0.0475	Strongly agree	172	4.2	A
					Agree	279	3.7	B
					Neither	177	3.6	B
					Disagree	67	3.2	C
					Strongly disagree	64	2.8	D

When it comes to opportunities for advancement, the t-tests identify four significant groups – A respondents feel strongly that their organisations provide them with opportunities for advancement, B respondents have neutral to moderately strong views about the fact that their organisations provide them with opportunities for advancement, C respondents have moderately weak views about the fact that their organisations do not provide them with opportunities for advancement and D respondents feel strongly that their organisations do not provide them with opportunities for advancement. From Table 116 it is evident that the more respondents feel their organisations provide them with opportunities for advancement, the higher their SAW scores will be. Thus, it seems that organisations who provide employees with opportunities for advancement might see higher levels of SAW.

The t-test results for the pairwise means comparisons of SAW scores and a substantial career change (I9a) are presented in Table 117.

Table 117: t-test results for SAW and a substantial career change (I9a) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
I9a	Substantial career change	1	4.96	0.0263	Yes	481	3.8	A
					No	278	3.5	B

With regards to whether respondents have made a substantial career change, there is a statistically significant difference between the SAW scores of those respondents who have made a substantial career change (A respondents) and those respondents who have not (B

respondents). Respondents who have made a substantial career change report slightly higher levels of SAW than respondents who have not made a substantial career change. It seems therefore that the decision to make a career change impacts on a person's experiences of spirit at work.

The t-test results for the pairwise means comparisons of SAW scores and career satisfaction (I10) are presented in Table 118.

Table 118: t-test results for SAW and career satisfaction (I10) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
I10	Career satisfaction	4	5.73	0.0002	Very satisfied	294	4.1	A
					Very dissatisfied	22	3.9	B
					Satisfied	320	3.6	C
					Neutral	72	3.1	D
					Dissatisfied	51	2.7	E

With regards to career satisfaction, the t-tests reveal that all five groupings are significantly different– A respondents are very satisfied with their career progression to date, B respondents are very dissatisfied with their career progression to date, C respondents are merely satisfied with their career progression, D respondents report neutral feelings about their career progression and E respondents are merely dissatisfied with their career progression. What is interesting in this case, is that both respondents who are very satisfied with their career progression (A respondents) and respondents who are very dissatisfied with their career progression (B respondents) report higher levels of SAW than those respondents who are merely satisfied (C respondents), dissatisfied (E respondents) or neutral (D respondents) about their career progression. It makes sense that those individuals who are very satisfied with their career progression would experience higher levels of SAW. What is perplexing is why respondents who are very dissatisfied with their career progression are still reporting high levels of SAW. One could postulate that perhaps the experiences of SAW are related to the

organisational environment and not to the individual's feelings about their individual career tracks.

The t-test results for the pairwise means comparisons of SAW scores and happiness at work (I11) are presented in Table 119.

Table 119: t-test results for SAW and happiness at work (I11) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
I11	Happiness at work	4	18.16	<.0001	Very happy	262	4.2	A
					Happy	338	3.6	B
					Very unhappy	32	3.4	C
					Neither	92	3.0	D
					Unhappy	35	2.3	E

With regards to happiness at work, the t-tests reveal that all five groupings are significantly different – A respondents are very happy at work, B respondents are happy at work, C respondents are very unhappy at work, D respondents are neither happy nor unhappy at work and E respondents are unhappy at work. Respondents who are happy (B respondents) and very happy at work (A respondents), report higher levels of SAW. Interestingly though, those who are very unhappy at work (C respondents) also report higher levels of SAW than those who are unhappy (E respondents) or neither happy nor unhappy (D respondents). It seems therefore that respondents report higher levels of SAW when they experience strong feelings of happiness or unhappiness at work.

The t-test results for the pairwise means comparisons of SAW scores and religious orientation (I14) are presented in Table 120.

Table 120: t-test results for SAW and religious orientation (I14) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
I14	Religious orientation	2	12.89	<.0001	Christian	544	3.8	A
					Other religions	111	3.7	A
					Atheists/Pantheists/Agnostics	104	3.2	B

With regards to religious orientation, the t-tests reveal only two significant groupings – religious respondents (A respondents) and respondents who are either atheistic, pantheistic or agnostic (in other words, not religious – B respondents). As is evident from Table 120, religious respondents report higher levels of SAW than non-religious respondents. Thus, it seems that religious respondents experience more spirit at work than non-religious respondents.

The t-test results for the pairwise means comparisons of SAW scores and strength of religious convictions (I15) are presented in Table 121.

Table 121: t-test results for SAW and strength of religious convictions (I15) (N = 759)

Item nr.	Variable measured	DF	F	p	Classes description	N	Mean	t- Grouping
I15	Strength of religious convictions	4	10.92	<.0001	Very strong	237	4.0	A
					Strong	212	3.7	B
					Moderate	204	3.5	C
					Weak	39	3.5	C
					Very weak	67	3.2	D

When it comes to strength of religious convictions the t-tests identify four significant groupings – A respondents with very strong religious convictions, B respondents with moderate to strong religious convictions C with weak religious convictions and D respondents with very weak religious convictions. From Table 121 it is evident that respondents with strong religious convictions report higher levels of SAW. It seems therefore, that those with strong religious convictions, have more experiences of spirit at work. This corresponds with the ANOVA

conducted on IS which indicated that strong religious convictions are also linked to higher individual spirituality (see Table 107).

CHAPTER 5

QUALITATIVE RESULTS

“When you encourage others, you in the process are encouraged because you’re making a commitment and a difference in that person’s life” – Zig Ziglar –

This chapter is dedicated to presenting and interpreting the qualitative data obtained from 13 semi-structured person-to-person follow-up interviews.

1 SEMI-STRUCTURED INTERVIEW PROCESS

The researcher used a semi-structured interview process for the interviews. During the interviews, interviewees were asked a series of ten open-ended questions that relate to the three key spirituality variables – IS, OS and SAW. Each question is related to one of the factors measured in each variable. There are three questions on IS – one representing each of the factors of IS. There are also three questions on OS. These three questions are similar as for IS, except they are about the organisation and not the individual. There are four questions on SAW – one for each of the factors of SAW. Applicable clarification and follow up questions were asked. The ten questions and the factors that each question relates to are listed in Table 122.

Table 122: Interview questions and factors they pertain to

Question	Variable	Factor/ Spirituality Dimension
1. What gives you personal meaning?	IS	Meaning in life
2. What does connection mean to you? What needs to be present for you to experience a meaningful connection with another person?		Connection/Larger context
3. What does compassion mean to you? How do you demonstrate compassion in your daily life?		Compassion
4. How does your organisation contribute to a greater purpose?		Meaning in life
5. How does your organisation ensure connection and collaboration among staff in the organisation? (If there was insufficient connection and collaboration in the		Connection/Larger context

organisation, the question was: What do you think your organisation could do to enable more connection and collaboration among staff in the organisation?)	OS	
6. How do you see compassion being expressed by your organisation? (If the organisation is not sufficiently compassionate, the question was: What do you think your organisation could do to demonstrate more compassion?)		Compassion
7. Describe what needs to happen for you to feel absorbed and invigorated by your work?	SAW	Engaging work
8. Describe a time when you felt most alive and energised by your work.		Mystical experience
9. Describe how and in what way your personal or spiritual beliefs play a role in your actions and decisions at work?		Spiritual connection
10. Describe your relationships with your co-workers.		Sense of community

In terms of Question 9, participants were first asked to expand on their religious views since they had provided an indication of their particular religious denomination and the strength of their religious convictions in the survey. They were asked about the reasons for their particular religious views and whether their religion plays a role in how they conduct themselves in life and work. They were then asked which particular values they specifically espouse. For those individuals who indicated that they were not religious or that they did not hold strong religious convictions, they were asked about their views on religion and whether they had any personal values that guide their decisions and actions in life.

Participants were also probed on their levels of happiness and motivation at work – especially if they had indicated in their survey responses that they had made a significant career change or that they were particularly unhappy or if they indicated that they would continue to work if they won the lottery and did not need to work. All participants were also asked whether they had any advice to organisations on how to create a better working environment where people could participate in meaningful work or experience connection and collaboration in the workplace.

As is illustrated in Table 122, the first three questions related to the interviewees' personal experiences of spirituality and asked them about what gives them personal meaning, what connection means to them and how they express compassion in their own lives. The remaining questions during the interviews focused on the interviewees' working environments and their

experiences of work and/or their views on how organisations contribute or detract from experiencing meaning in work. It is necessary to provide an indication of each of the interviewees' scores obtained on the HSS, OSVS and SAW instruments as this will allow for more meaningful interpretations of their responses. Table 123 provides a breakdown of the interviewees' scores for each of the three spirituality measurement instruments – HSS, OSVS and SAW.

Table 123: Interviewees' scores for each of the spirituality instruments (N = 13)

Respondents with high scores on HSS						
Respondent ID	HSS Score (IS)	High, Moderate or Low IS?	OSVS Score (OS)	High, Moderate or Low OS?	SAW Score (SAW)	High, Moderate or Low SAW?
26	4.9	High	4.3	High	3.9	Moderate
183	4.8	High	3.5	Moderate	4.1	High
251	4.8	High	3.0	Moderate	2.1	Low
313	4.8	High	5.0	High	4.8	High
395	4.8	High	4.8	High	4.8	High
550	4.8	High	4.8	High	4.8	High
645	4.8	High	5.0	High	4.8	High
Respondents with low scores on HSS						
Respondent ID	HSS Score (IS)	High, Average or Low IS?	OSVS Score (OS)	High, Average or Low OS?	SAW Score (SAW)	High, Average or Low SAW?
66	2.9	Low	2.2	Low	3.2	Moderate
201	3.0	Moderate	2.9	Low	3.4	Moderate
259	2.9	Low	3.3	Moderate	1.8	Low
441	2.9	Low	3.5	Moderate	2.7	Low
681	2.8	Low	2.4	Low	2.7	Low
750	3.0	Moderate	1.7	Low	1.9	Low

From Table 123, it is evident that those respondents who score high on the HSS instrument and therefore have high IS, also tend to score high on the OSVS instrument and the SAW instrument; meaning they also tend to have high OS and high SAW. Only two of the interviewees who score high on the HSS, have moderate scores for the OSVS (i.e. Respondent

183 and Respondent 251). During the interview, Respondent 251, indicated that at the time of completing the survey, she was working at a different organisation and she was not very happy or satisfied with her work at the time. She was feeling increasingly demotivated and despondent – hence the reason for her moderate score on the OSVS and her low score on the SAW. She has consequently made a substantial career shift and is now working in an organisation where she is very happy and very satisfied with her work. She finds her work rewarding and fulfilling on a personal level and she indicates that even her husband has commented that there has been a significant shift in her overall mood towards a more positive state of being. One could assume that her OSVS and SAW scores would probably have been higher if she had completed the survey whilst at her new job.

Those individuals who score low on the HSS and therefore have low IS, also tend to score moderate to low on the OSVS instrument as well as on the SAW instrument; meaning they also have low OS and low SAW.

2 PHENOMENOLOGICAL DATA ANALYSIS

Data collected during the qualitative research phase were analysed by applying the four steps in phenomenological data analysis as discussed by Creswell (2007) and Leedy and Omrod (2010). All the responses to the interview questions were analysed in order to identify statements that relate to the research questions posed in this study. The researcher had to sift through all the data to identify only the relevant information that provide possible insights or answers to the research questions. The qualitative data analysis therefore commenced with a process of open coding which involved applying preliminary codes to the data. All the relevant statements were grouped into categories called ‘meaning units’. The researcher also had to identify any divergent perspectives that present an opposite view to the ideas reflected in the ‘meaning units’. The process of open coding was followed by a process of axial coding. In axial coding, the initial codes or ‘meaning units’ are grouped into ‘families’ or ‘categories’. The researcher then derived overall descriptions of the phenomena described in the interviews and how they relate to each of the research questions posed in this study. This was done through

selective coding where meaningful relationships are assigned to different code ‘families’. Finally, themes are derived that provide possible answers to the research questions posed in Chapter 1.¹

2.1 THE CODING PROCESS

2.1.1 Open Coding

All the transcribed interviews were loaded onto NVivo. These transcribed pages were used as the initial input to the first stage of coding. The first stage of coding is called open coding and involves working through the transcriptions and generating open codes by allocating specific words or phrases to particular sections of the transcribed text in order to see how often particular themes or patterns are repeated. Following this first process of open coding, 162 initial or preliminary codes were generated. Table 124 provides a breakdown of the initial codes that were generated during this first phase of coding. The table also provides an indication of how many times each code appears under the high IS and low IS hermeneutic units respectively.

Table 124: Initial codes generated during first phase of coding

Initial Codes Generated	High IS	Low IS
1: A negative employee affects the bottom line	1	0
2: All religions espouse the same message	3	1
3: Allow for flexibility in work	8	8
4: Allow the team to flourish and grow	7	5
5: Ask for input from staff	8	5
6: Be authentic with others to connect with them	7	5
7: Be loyal to staff and they will be loyal to you	2	3
8: Believe the best about employees	6	0
9: Camaraderie and friendship in the work environment	9	2
10: Choose your staff carefully	1	1
11: Collaboration is about customer satisfaction	0	1
12: Collaboration is based on a shared purpose	3	3

¹ See Appendix H for a Code Book with all the codes and descriptions generated during the qualitative data analysis

Initial Codes Generated	High IS	Low IS
13: Collaborative decision-making for the greater whole	7	2
14: Communicate in a respectful way	0	1
15: Compassion and understanding for the individual	26	7
16: Compassion is about being honest	3	1
17: Compassion is about respect	15	3
18: Compassion is about understanding	17	5
19: Compassion is an investment in someone	0	2
20: Compassion is showing mercy	0	1
21: Compassion is unconditional care	0	1
22: Conflict is seen as a good thing	1	0
23: Connection is about communication	0	3
24: Connection is about empathy	9	0
25: Connection is about head and heart	2	0
26: Connection is about trust	0	2
27: Connection is about understanding	9	1
28: Corporate greed erodes spirituality in the workplace	2	2
29: Corporates are toxic	2	3
30: Create a comfortable work environment	11	5
31: Create a happy organisational culture	8	3
32: Creating something new gives me meaning	0	2
33: CSI is not the goal. The company should not be expected to do more	0	5
34: Dictatorial leadership style	0	1
35: Difference between religion and spirituality	2	1
36: Do not allow cowards to lead	0	1
37: Do not judge others	2	3
38: Emphasise service in everything we do	3	0
39: Employees are not robots	0	3
40: Fake compassion	0	1
41: Family gives me personal meaning	6	3
42: Family is important	6	3
43: Find common ground for connection	2	5
44: Flat organisational structures are needed	8	5
45: Get involved with staff and show you care	15	5
46: Get out of your comfort zone	2	0
47: Get staff involved in CSI initiatives	5	0
48: Goals are filtered down to all levels of the organisation	5	2

Initial Codes Generated	High IS	Low IS
49: Highly qualified and well-trained staff	3	1
50: Hold employees accountable for their output	1	3
51: I am energised by finding solutions to problems	0	3
52: I am no longer passionate and excited	0	2
53: I am not an emotional person	1	3
54: I am not religious	3	4
55: I am religious	4	2
56: I can do my work anywhere. I don't need to be here.	0	1
57: I create my own life purpose without the organisation	0	1
58: I do not want to sacrifice quality time with my family for work	0	1
59: I enjoy the challenge	4	4
60: I feel excited about work on most days	1	2
61: I love what I do	4	2
62: I practice spirituality without religion	2	3
63: I trust the people I work with	6	2
64: I want to add value	5	3
65: Improve working conditions of people	6	1
66: In large corporates sub-cultures will form	1	1
67: Inform employees of the company's situation	6	3
68: It is not about money	5	1
69: Leaders must set the example	6	0
70: Live in a non-impactful way	1	0
71: Live with passion	1	1
72: Look after the whole person	3	3
73: Love is the most important value	3	1
74: Maintain a professional relationship	4	2
75: Maintain high standards of excellence	5	0
76: Make people feel part of the family	6	0
77: Making a contribution	10	3
78: Making a difference	17	8
79: Management expects too much	0	2
80: Morals do not come from religion	1	3
81: My boss is incompetent	0	1
82: My religion is not conscious. Rather my values are.	0	2
83: Offer support and encouragement to staff	13	2
84: Only a small part of my work is exciting	0	2

Initial Codes Generated	High IS	Low IS
85: Open, clear and transparent communication	14	8
86: Opportunities for growth and development	8	4
87: Pay people fairly	2	2
88: People are allowed to disagree	8	1
89: People give of their time	5	1
90: Personal meaning is about making a difference	4	4
91: Positive feedback makes me feel energised in work	0	1
92: Practical CSI initiatives	6	0
93: Practical examples of compassion	8	8
94: Provide feedback to staff	6	4
95: Quality time is necessary for connection	3	0
96: Recognise people have lives outside of work	8	4
97: Recognition for good work	6	7
98: Relationships are important	9	0
99: Religion encourages hypocrisy	1	2
100: Religion is often followed out of tradition	3	3
101: Religion is too dogmatic	2	3
102: Religion plays a big role in my life	4	1
103: Respect for the individual	24	7
104: Reward employees when the company does well	7	5
105: Sense of achievement	9	4
106: Sense of family in the organisation	6	3
107: Sense of pride in the team	7	4
108: Set clear and specific goals to ensure collaboration	4	4
109: Share information with staff	7	5
110: Sharing common values for connection to be possible	1	4
111: Show employees that you are giving back	2	1
112: Show people that you care	13	6
113: Special connection with friends	3	0
114: Spend time with someone and listen to them	6	2
115: Spirituality is about a universal consciousness	1	0
116: Spirituality is about respect and understanding	2	1
117: Spirituality is connecting with nature	1	1
118: Spread positive energy to the team	2	0
119: Staff development	5	1
120: Staff meet regularly	3	2

Initial Codes Generated	High IS	Low IS
121: Staff turnover is low	1	1
122: Stay away from negative people	1	0
123: Success starts at home	1	0
124: Team work and collaboration	11	7
125: The goal was to make money	3	9
126: The organisation does not contribute to a greater purpose	0	6
127: The organisation is not transparent	0	2
128: The organisation is selfish and arrogant	0	1
129: The organisation is transparent	4	0
130: The size of the organisation matters	5	5
131: There are not enough resources	0	2
132: There are universal values	1	1
133: There is a lack of transparency	0	2
134: There is no communication in the organisation	0	1
135: There is no connection in the organisation	0	1
136: There is too much control in corporates	1	2
137: Tightly integrated team that work closely together	8	3
138: Tolerate employee mistakes	2	1
139: Treat employees fairly	0	5
140: Treat everyone the same	5	3
141: Trust that staff are capable and can do their work	7	3
142: Understanding another person	8	6
143: Values - Authenticity	1	0
144: Values - Compassion	0	1
145: Values - Do not steal	0	1
146: Values - Do the right thing	1	1
147: Values - Excellence	2	1
148: Values - Honesty	7	3
149: Values - Integrity	5	3
150: Values - Kindness	1	0
151: Values - Passion	0	1
152: Values - Professionalism	2	1
153: Values - Respect	1	1
154: Values - The Golden Rule and being a good person	1	2
155: Values - Transparency	4	0
156: Values - Trust	4	1

Initial Codes Generated	High IS	Low IS
157: Values - Trustworthiness	0	2
158: We adhere to policies	0	3
159: We are all interconnected	3	0
160: We have good relationships	9	4
161: Work gives me personal meaning	8	6
162: Work must be a safe place	3	0

2.1.2 Axial Coding

The open coding process was followed by an axial coding process where the 162 codes that were generated during the open coding stage, were grouped into different code families or groupings. Families or groupings were formed by clustering together those open codes that seemed to represent similar families, groupings or themes. This process of axial coding led to 13 code families or axial codes being identified. Table 125 below provides a breakdown of the 13 code families that were identified as well as how often these code families appear in the high IS and the low IS hermeneutic units respectively.

Table 125: Code families created during axial coding

Axial Codes Created	High IS	Low IS
1: Characteristics of Non-Spiritual Work Environments	0	19
2: Characteristics of Spiritual Work Environments	155	62
3: Collaboration	26	17
4: Compassion	86	43
5: Connection	39	20
6: Core Values	33	19
7: CSI initiatives and contributions to a greater purpose	32	30
8: Energy and Vigour	45	31
9: How to treat people in organisations	178	89
10: Personal Meaning	24	18
11: Views on Corporates	6	8
12: Views on Religion	20	18
13: Views on Spirituality	11	10

Table 125 illustrates that all but two of the axial codes are more prominent in the high IS hermeneutic unit than in the low IS hermeneutic unit, being mentioned or highlighted more frequently by high IS participants than low IS participants.

2.1.3 **Selective Coding**

Lastly a process of selective coding was initiated. During selective coding, the axial codes generated from the axial coding phase were turned into themes that highlight the most important topics that surfaced during the semi-structured interviews. As is evident from Table 125, not all of the axial codes were equally important. For this reason, two rules were considered and applied in selecting themes from the axial codes. Firstly, an axial code was translated into a theme if its frequency across either the high IS or the low IS hermeneutic units was very high. A frequency above 20 was considered high. Secondly, if there was a substantive difference in the high IS and low IS frequencies, the axial code was also considered significant. Axial codes with lower frequencies were therefore still considered relevant if the difference in frequency between the high IS and low IS hermeneutic units was more than ten. Based on these two rules, themes were generated from ten of the 13 axial codes in Table 125. These ten axial codes are highlighted in yellow in Table 125. The following themes emerged from the data:

- 1) *Advice to organisations on how to treat people for more effective collaboration, engagement and commitment.* This theme is derived from the axial code 'How to treat people in organisations' and describes how participants would like to be treated by their organisations. When participants were asked if they had any advice for organisations on how they can obtain greater collaboration, engagement and commitment from their staff, participants offered their views on the things that organisations can implement to obtain greater collaboration, engagement and commitment.
- 2) *Characteristics that describe spiritual work environments.* This theme is derived from the axial code 'Characteristics of spiritual work environments' and highlight how participants who work in spiritual organisations perceive and describe their work environments. The axial code that this theme is based on, is mentioned much more often by high IS participants than low IS participants as most of the high IS participants also had high OS scores (see Table 123).

- 3) *The elements that characterise compassion.* This theme is derived from the axial code 'Compassion' and describes what compassion means to the participants.
- 4) *The elements that lead to participants experiencing energy and vigour at work or in their work.* This theme is derived from the axial code 'Energy and Vigour' and relates to the things that lead to participants feeling energised and invigorated at work or by their work as well as the things that inhibit their ability to feel energised and invigorated at work or by their work.
- 5) *The elements necessary for connection to be experienced.* This theme is derived from the axial code 'Connection' and answers the question: what is required for participants to experience a connection with another person? It lists the elements that serve as pre-requisites for experiencing a connection with someone.
- 6) *Core values espoused by participants.* This theme is derived from the axial code 'Core Values' and discusses the core values that participants espouse and that guide their decisions and actions in life and work.
- 7) *Corporate Social Investment (CSI) initiatives and ways in which organisations are contributing to a greater purpose.* This theme is derived from the axial code 'CSI initiatives and contributions to a greater purpose' and describes the corporate social investment initiatives undertaken by the organisations that the participants work in and how they think their organisations are contributing to a greater purpose.
- 8) *The elements required for effective collaboration in organisations.* This theme is derived from the axial code 'Collaboration' and describes what collaboration is and which elements participants view as necessary for them to effectively collaborate with others in their organisations. This theme highlights how collaboration among people in an organisation is accomplished.
- 9) *The elements that contribute to participants' personal meaning in life.* This theme is derived from the axial code 'Personal Meaning' and describe the things that give meaning to participants' lives.
- 10) *Characteristics that describe non-spiritual work environments.* This theme is derived from the axial code 'Characteristics of non-spiritual work environments' and highlight how participants who work in non-spiritual work environments perceive and describe their work environments. The axial code that this theme is based on, is only mentioned by low IS

participants and not by high IS participants. Most of the low IS participants also had low OS scores (see Table 123).

The remainder of this chapter is devoted to presenting the coded data according to the themes listed above. Similarities and differences between high IS and low IS individuals will be highlighted. In each case, selected quotations drawn from the semi-structured interviews are presented as evidence of the construction of a theme.

2.2 GENERATED THEMES

2.2.1 Theme 1: Advice to organisations on how to treat people in organisations

A theme emerges that provides advice to organisations on how they should treat people if they want to create opportunities for more effective collaboration, engagement and commitment. This theme is derived from the axial code ‘How to treat people in organisations’ and describes how participants would like to be treated by their organisations. When participants were asked if they had any advice for organisations on how they can obtain greater collaboration, engagement and commitment from their staff, participants offered their views on the things that organisations can implement to obtain greater collaboration, engagement and commitment.

Table 126 provides a breakdown of the preliminary codes that constitute the axial code ‘How to treat people in organisations’ for both high IS and low IS participants. The numbers in brackets correspond to the number of times the code appears across the high and low IS hermeneutic units.

Table 126: Axial code ‘How to treat people in organisations’

High IS Participants (Axial code frequency = 178)	Low IS Participants (Axial code frequency = 89)
Get involved with staff and show you care (15)	Allow for flexibility in work (8)
Offer support and encouragement to staff (13)	Show people that you care (6)
Show people that you care (13)	Allow the team to flourish and grow (5)
Create a comfortable work environment (11)	Create a comfortable work environment (5)
Allow for flexibility in work (8)	Flat organisational structures are needed (5)

High IS Participants (Axial code frequency = 178)	Low IS Participants (Axial code frequency = 89)
Create a happy organisational culture (8)	Get involved with staff and show you care (5)
Flat organisational structures are needed (8)	Reward employees when the company does well (5)
Recognise people have lives outside of work (8)	Share information with staff (5)
Allow the team to flourish and grow (7)	Treat employees fairly (5)
Reward employees when the company does well (7)	Provide feedback to staff (4)
Share information with staff (7)	Recognise people have lives outside of work (4)
Trust that staff are capable and can do their work (7)	Be loyal to staff and they will be loyal to you (3)
Believe the best about employees (6)	Create a happy organisational culture (3)
Improve working conditions of people (6)	Hold employees accountable for their output (3)
Inform employees of the company's situation (6)	Inform employees of the company's situation (3)
Leaders must set the example (6)	Look after the whole person (3)
Make people feel part of the family (6)	Treat everyone the same (3)
Provide feedback to staff (6)	Trust that staff are capable and can do their work (3)
Maintain high standards of excellence (5)	Maintain a professional relationship (2)
Staff development (5)	Offer support and encouragement to staff (2)
Treat everyone the same (5)	Pay people fairly (2)
Maintain a professional relationship (4)	Choose your staff carefully (1)
Look after the whole person (3)	Communicate in a respectful way (1)
Be loyal to staff and they will be loyal to you (2)	Improve working conditions of people (1)
Pay people fairly (2)	Staff development (1)
Tolerate employee mistakes (2)	Tolerate employee mistakes (1)
Choose your staff carefully (1)	

Getting involved with employees, offering support and encouragement and demonstrating that you care, are the most important elements highlighted by high IS participants. High IS participants feel organisations should try to create a comfortable work environment and should allow for flexible work arrangements where there is a recognition of the fact that people have lives outside of work. There is an emphasis on creating a happy organisational culture and creating flatter organisational structures. It is important to allow the team to flourish and grow, to share information with staff and to reward staff when the company does well.

For low IS participants, flexibility in work seems to be most important. Low IS participants also feel organisations should demonstrate care, that they should allow their team to flourish and grow and that they should create a comfortable working environment. Again, there is an

emphasis on creating a flat organisational structure, sharing information with staff and rewarding employees when the organisation does well. There is also an emphasis on treating employees fairly.

When working through the elements that participants highlight for how people would like to be treated, it becomes evident that the initial codes that constitute the axial code 'How to treat people in organisations' can be sub-divided into seven core ideas or sub-themes that encapsulate what participants' views are on how to treat people:

1) Demonstrate care and compassion for employees. This sub-theme includes getting involved with staff and showing that you care or offering support and encouragement and is illustrated in the quotations from both high IS and low IS participants below:

- *"I just want to be left to do my job and to do it well and to the best of my ability and within an environment that says 'listen we understand who you are as a person'."* – Respondent 66 (low IS)
- *"Listen to them and allow them to get involved and to take initiative"* – Respondent 251 (high IS)
- *"...make sure it is not all about the dollars and the cash you are going to earn from them. It needs to be a win-win both sides"* – Respondent 259 (low IS)
- *"Communicate clearly to build strong relationships... Leaders should not only lead, they should be led by trying to understand what people are going through. Have compassion for your people"* – Respondent 313 (high IS)
- *"Be fair and trustworthy. Forgive mistakes. Allow employees to make mistakes as it is part of learning"* – Respondent 550 (high IS)
- *"Encourage and empower your staff. Have compassion for employees and their circumstances. Try to understand their individual circumstances... Whatever you expect of others, be willing to do it yourself. Treat people with compassion and understanding"* – Respondent 645 (high IS)

2) Creating a better work environment. This sub-theme includes creating a comfortable work environment; focusing on developing a happiness culture; having a flat organisational structure and actively improving employees' working conditions. This sub-theme is reflected in the quotations from both high IS and low IS participants below:

- *“An informed staff compliment is a happy staff compliment. The more you share and the more you entrust, the easier it becomes for people to give back.” – Respondent 251 (high IS)*
- *“I was in a serious snake-pit before. It was and still is a very, very unhappy place and one of my criticisms there was the high staff turnover and I said to myself when I open my own shop, I’m gonna keep staff. I’m gonna make them happy and pay them well and I’m going to engage them” – Respondent 395 (high IS)*
- *“By making sure everybody is happy...A flatter organisational structure allows for faster implementation of decisions and allows staff to take initiative. Encourage team work and collaboration. Encourage people to help each other and to take other’s needs into consideration. Be open about the decisions you take and consider the impact of your decisions on the team.” – Respondent 645 (high IS)*
- *“I would be happy if there are meaningful relationships, I get rewarded fairly for what I do, my work gets recognised and you know, you have fun in doing it.” – Respondent 681 (low IS)*

3) Recognition of employees’ inner being which includes looking at the whole person; recognising that people have lives outside of work; providing flexibility in work and communicating with employees in a respectful manner. This sub-theme is reflected in the quotations from high IS and low IS participants below:

- *“There needs to be a level of recognition that you cannot exactly cut your work life and your personal life down the centre. You can’t come to work and leave home at home or go home and leave work at work. They need to recognise that we are not machines. We have emotions. We have feelings. The way staff are sometimes spoken to, I don’t feel is appropriate. Employees’ feelings should be acknowledged and Management should communicate in a more respectful manner...The bottom line is that you are working with human beings and there needs to be some type of human interaction and transparency about what’s going on.” – Respondent 66 (low IS)*
- *“Give them flexibility” – Respondent 201 (low IS)*
- *“...make sure it is not all about the dollars and the cash you are going to earn from them. It needs to be a win-win both sides” – Respondent 259 (low IS)*
- *“If you want productivity, you’ve got to look at the whole person... Recognise that people are individuals and they have personal lives outside of work...” – Respondent 313 (high IS)*
- *“Don’t swear or belittle. Treat people with respect. Recognise that people have an inner being that needs to be nurtured and that balance in life is critical for success.” – Respondent 550 (high IS)*

- *“You’ve got to recognise that they are human beings...”* – Respondent 645 (high IS)

4) Providing opportunities for growth and development. This sub-theme includes providing structured career paths and allowing people to flourish and grow; sharing information with employees and informing employees of the company’s situation; providing employees with regular feedback; holding employees accountable for their output and rewarding employees when the company does well. These ideas are reflected in the quotations from both high IS and low IS participants below:

- *“You should treat people fairly and give them a chance to grow.”* – Respondent 201 (low IS)
- *“Employees should always be given the opportunity to grow, even if it’s just in a small way. This makes them know that they are valued and that they are not just there to do the basic requirements of their job, you know...Demonstrate that employees are valued. Recognise their contributions and encourage them to grow.”* – Respondent 251 (high IS)
- *“You need to ensure that you create a proper career path and career planning for your staff. Your staff needs to know where you are heading and how they fit with the plan. What we have also seen from our side is regular feedback...When there is need to praise, give praise. Where there is need to re-align, re-align immediately. So regular feedback is quite important. People feel safe in an environment where they know what’s going on. Be honest about where you are going strategically. The more you get your staff in line with your strategic objectives, the more you can equip them to achieve what you want them to achieve.”* – Respondent 259 (low IS)
- *“Have a big shared purpose that goes beyond just making money. There has to be purpose to what you do and you should be working to make a difference to others. You have to build your business on shared values. Recognise the importance of having the right team of people. Hold people accountable for their own decisions and actions”* – Respondent 550 (high IS)
- *“Be open and transparent about the state of the business and their role in the business. Hold people accountable for their own output... Give tangible rewards for good work”* – Respondent 645 (high IS)

5) Developing trust and loyalty by trusting that staff are capable of doing their work; believing the best about people and being loyal to employees. This sub-theme is illustrated by the quotations from both high IS and low IS participants below:

- *“I think it’s partly trusting your staff. You know, my experience of corporate was that there is very little trust that staff have the ability to deliver and there is this very tight management to ensure that it all happens...”*
– Respondent 26 (high IS)
- *“There needs to be an element of trust between employer and employee. You should trust that I can do my job. That will also make it a hell of a lot more enjoyable if you don’t constantly have to feel as though you are being watched or tested or there is an eagle eye on you; you know, this big brother idea...and if you put one foot out of place...that to me is not a caring employer at all.”* – Respondent 66 (low IS)
- *“I trust them. My people are well trained...My staff take initiative and ensure that things get done.”* – Respondent 201 (low IS)
- *“If you show loyalty and compassion to people, they will do anything to pay that back. Show loyalty and compassion to people to get increased commitment from them...Create trust. Be honest and transparent”*
– Respondent 313 (high IS)
- *“Have open and transparent conversations with people.”* – Respondent 550 (high IS)

6) Treating employees fairly which includes paying them fairly and is illustrated by the quotations from both high IS and low IS participants below:

- *“You should treat people fairly and give them a chance to grow.”* – Respondent 201 (low IS)
- *“Try to be fair...Keep the conversation open...always try to be rational and reasonable...”* – Respondent 441 (low IS)
- *“Pay people fairly”* – Respondent 645 (high IS)
- *“Ensure remuneration is exactly according to performance...to the value of the person contributing...”* – Respondent 750 (low IS)

7) Leadership includes choosing your team carefully and setting an example and is reflected in the quotations from both high IS and low IS participants below:

- *“First of all, it’s the kind of person that you employ. They must be able to fulfil the very vision that we have. That’s not always easy. You sometimes inherit staff who don’t have those skills. Then you’ve got to lead them that way. So it’s all about leadership first of all.”* – Respondent 183 (high IS)

- *“It starts with how you select your staff. You need to select staff that fits your organisation and it’s not about selecting them to think the same as what you think. Your strength lies in diversity...So first, when you select staff, make sure they fit.”* – Respondent 259 (low IS)
- *“Set an example...”* – Respondent 313 (high IS)
- *“Lead by example....”* – Respondent 645 (high IS)

Thus we learn from the participants to this study that in order to create an environment where effective collaboration, engagement and commitment is possible, managers need to get involved with their staff and demonstrate care and compassion for their staff. Managers need to work actively at creating comfortable working environments where people can be happy and productive. A critical ingredient to this kind of environment seems to be a flatter organisational structure and involvement of employees in decision-making. This element is also highlighted in the next theme and in theme 8. According to Gratton (2011) the contemporary world of work suggests a change in organisational structures from hierarchies towards flatter organisational structures where collaboration is possible and where the individual will be allowed to bring his/her whole self to work. Various authors (e.g. Anderton, 2012; Ashmos & Duchon, 2000; Conger, 1994; Fairholm, 1996; Ferreira Vasconcelos, 2013; Mirvis, 1997) have highlighted how the workplace is being rediscovered as a source of spiritual growth and community and this idea seems to be echoed by the participants to this study.

Ashmos and Duchon’s (2000) focus on recognising the inner being of employees also surfaces as a key element in how employees would like to be treated in organisations. There is cry for respect and compassion and for recognising that employees have lives outside of work. Allowing for flexibility in work and trusting that employees are competent and can do their work, without having to be micro-managed goes a long way in increasing morale and motivation. Respondent 645 complains: *“In a large corporate environment, bosses don’t care how they treat their employees; whether they hurt them; whether they mistreat them; whether they abuse them verbally or whatever.”* The desire for respect and care is highlighted in this theme with participants indicating that managers should think about how they communicate with employees; that they should engage and communicate in a respectful manner.

Other authors have argued that people are seeking meaningful work that allows for learning and development and that provides a sense of competence or mastery (Anderton, 2012; Cartwright & Holmes, 2006; Chalofsky, 2003; Ferreira Vasconcelos, 2013; Geldenhuys et al., 2014; Heinsohn, 2012; Kendall, 2012; Konz & Ryan, 1999; Marschke et al., 2011; Pfeffer, 2010; Rosso, Dekas & Wrzesniewski, 2010; Saks, 2011; Seligman, 2008; Steger & Dik, 2010). They want to be useful (Strack, Fottler, Wheatley & Sodomka, 2002). These ideas are again confirmed by participants' views that companies and managers should provide opportunities for personal growth and learning in the organisation and that good work should be recognised and rewarded.

Lastly, fair treatment and good leadership are also highlighted as key elements for success. Leaders need to not only treat people fairly, but also pay them fairly and leaders need to not only carefully select their teams, but actively work at setting a good example to employees of the behaviour they would like their employees to display.

2.2.2 Theme 2: Characteristics of spiritual work environments

The second theme that emerges is the characteristics of spiritual work environments and highlights how participants who work in spiritual organisations perceive and describe their work environments. The axial code that this theme is based on, is mentioned much more often by high IS participants than low IS participants (see table 125) as most of the high IS participants also have high OS scores (see Table 123). Table 127 provides a breakdown of the preliminary codes that constitute the axial code 'Characteristics of Spiritual Work Environments' for both high IS and low IS participants. The numbers in brackets correspond to the number of times the code appears across the high and low IS hermeneutic units.

Table 127: Axial code ‘Characteristics of Spiritual Work Environments’

High IS Participants (Axial code frequency = 155)	Low IS Participants (Axial code frequency = 62)
Respect for the individual (24)	Respect for the individual (7)
Open, clear and transparent communication (14)	Sense of achievement (4)
Team work and collaboration (11)	Sense of pride in the team (4)
Camaraderie and friendship in the work environment (9)	We have good relationships (4)
Relationships are important (9)	Sense of family in the organisation (3)
Sense of achievement (9)	Tightly integrated team that work closely together (3)
We have good relationships (9)	Camaraderie and friendship in the work environment (2)
People are allowed to disagree (8)	Goals are filtered down to all levels of the organisation (2)
Tightly integrated team that work closely together (8)	I trust the people I work with (2)
Sense of pride in the team (7)	Highly qualified and well-trained staff (1)
I trust the people I work with (6)	People are allowed to disagree (1)
Recognition for good work (6)	People give of their time (1)
Sense of family in the organisation (6)	Staff turnover is low (1)
Goals are filtered down to all levels of the organisation (5)	
People give of their time (5)	
The size of the organisation matters (5)	
The organisation is transparent (4)	
Highly qualified and well-trained staff (3)	
Work must be a safe place (3)	
Get out of your comfort zone (2)	
Conflict is seen as a good thing (1)	
Staff turnover is low (1)	

High IS participants are more likely to indicate that they work in an organisation with high OS.

These high OS environments are characterised by:

1) Respect for the individual:

- *“It is great working for this company. We won the best company to work for last year and it is easy to understand why when you work here. There is a lot of consideration for the staff. There is respect for the individual and for the staff as a greater collective. There is a big focus on making the environment as comfortable as possible for staff. The company is very good at recognising that a happy staff member is a productive member and that a happy and productive staff member contributes to a happy company...I think that there is a lot of compassion and understanding for the individual as well. You know people have families and people have children and they have their own existence and stuff that happens outside of what*

happens between eight and five...You know I have worked in corporates before and there's this very strict management or hierarchical structure that exists and that doesn't exist here" – Respondent 26

- *"I think it is about understanding that everybody has a life outside of work and we are very tolerant of personal challenges like a kid being sick – we all have kids...What makes us different is the understanding that I want to be treated with respect. What I want, I will give to others. The organisation offers flexible work arrangements for their staff. Staff are allowed to work from home when necessary...When my mother died for example, I stayed away from work for 2 months. In any other context, I would not have had that level of compassion and respect. And I feel so much gratitude towards my business partner for allowing me the time to work through my loss..." – Respondent 313*

2) Open, clear and transparent communication:

- *"The team has a common purpose and there is open communication. There is open, constructive criticism and it makes for a good working environment." – Respondent 251*
- *"This is a safe place. You can say anything and there is no judgement..." – Respondent 313*

3) Teamwork and collaboration:

- *"Everyone works as a team. It's really a team environment. We talk and there's no politics, no nastiness or resentment. Everyone is just there for one purpose. We all want the organisation to be a success" – Respondent 251*
- *"We try and strive for happiness. We work hard, we pay well, we've got good clients, but we work in teams. We always work as a team." – Respondent 395*

4) Camaraderie and friendship in the working environment:

- *"There is close interaction between the team. We've been really lucky. It's an amazing team and everyone is just focused...and working together, you know. There are no personal issues or fights. It's an amazing work environment...t's great. We all get along really, really well. I mean, we're friends before anything" – Respondent 251*

5) An emphasis on relationships at work:

- *"Very good relationships. We get on extremely well." – Respondent 26*
- *"We then encourage them as they learn amongst themselves to integrate in the team and then we set up very formal interactions between them. We get them together, we ask them what they have on their hearts and what should we put on the agenda?" – Respondent 550*

6) A sense of achievement among staff:

- *“Knowing that the kind of work that we do that we are making a difference” – Respondent 313*
- *“From a job creation and community building perspective, this company does better work in this community than any other institution that I’m aware of. The business vision says: ‘We create life-changing opportunities every day.’ – Respondent 550*

7) Tightly integrated teams where people work closely together and where people are allowed to disagree:

- *“We have the kind of relationship where if someone doesn’t agree with the decision that I’m making, they would say I don’t agree and I have in turn the respect to say, ok I accept that you don’t agree; let’s talk about it and come to a consensus on the best decision for the division and for the greater good, you know. So ja, the team is mature and have good decision qualities. You know I respect their input and their opinion so a lot of decisions are made as a collaborate decision rather than I’m the boss and I say what goes.” – Respondent 26*
- *“There is close interaction between the team. We’ve been really lucky. It’s an amazing team and everyone is just focused...and working together, you know. There are no personal issues or fights.” – Respondent 251*
- *“All of us try to build each other; to make a contribution for the other person to grow. They would spontaneously offer to help me, if they see I get stuck in an operational activity where I really battle...So we help each other. It’s easy to do that, we are only 10 people. It’s a small company. In a large corporate environment, you won’t be able to do that.” - Respondent 645*

8) A sense of pride and trust in the team:

- *“I think support as well; support in decision-making, support when things go wrong; just knowing you can fall back on whomever you need to.” – Respondent 26*
- *“The organisation operates in full transparency. The staff knows exactly how the business is doing and they can answer any questions on the business. We encourage people to look at their own behaviour in conflict situations and to consider how their behaviour could have contributed to the situation. In this organisation, conflict is not considered a bad thing. It is viewed as an opportunity to build relationships and gain understanding from each other. Mistakes are therefore tolerated because they are considered part of the learning and growth process.” – Respondent 550*

9) There is recognition for good work:

- *"I think recognition plays a big part in it. There's a lot of effort from myself and my team in getting what we do into a workable state and meeting our clients' needs and I think recognition goes a long way and that fortunately comes from management as well as from our clients."* – Respondent 26

10) There is a sense of family in the organisation:

- *"[The company] seems to have kept a fairly tight family-feel to the business. Whenever there is an opportunity to get staff together to meet, they do it and they're quite regimental about it from that perspective to make sure that we're getting everyone into head office as regularly as we can to meet and they do cross-team building so this team is going to meet with this team and they will spend the day together and get to know each other."* – Respondent 26
- *"It's very close. We almost live in one another's pocket. I know exactly when they are not happy and they know when I'm not happy. I know they work hard. I think it is very positive, very contributing"* – Respondent 645

High IS participants working in high OS environments describe their organisations as displaying understanding, care, respect, empathy. They consistently mention the work flexibility and the consideration for people as well as the fact that they receive support and encouragement from their organisations. Readers will note from the quotations above, that the core elements that emerged in theme 1 on how to treat employees are often also mentioned here. Logically, by implementing the core elements of treating employees better, organisations in effect create more spiritual work environments.

Low IS participants are less likely to describe their work environments as having high OS. What is striking is that the low IS participants that do describe their work environments as spiritual, are all the owners of their respective organisations. They therefore describe the things they implement to create a positive work environment. The things they mention include:

- 1) Having respect for the individual – this element was heavily emphasised by the high IS participants and although it is the main element mentioned by the low IS participants as well, there is a lot less emphasis on this element with the low IS participants.
- 2) Having a sense of achievement or pride in the team
- 3) Having good relationships with colleagues

- 4) A sense of family among staff in the organisation
- 5) Tightly integrated teams that work closely together

The focus in these environments is therefore on building good relationships and encouraging teamwork and pride in the team. The views of low IS participants at work are reflected in the quotations below:

- *“Some of my staff work from home and they are incredibly grateful, because they can take care of their kids. It’s a comfortable work environment. I recognise that the biggest asset we have is our people. I trust them. My people are well trained and my staff turnover is very low. My staff take initiative and ensure that things get done.” – Respondent 201*
- *“A few years ago we had a coloured chap in the workshop that struck me as being more intelligent. He actually should not be on the workshop floor, so I brought him into the office and he has worked with me now for six years and he is now a director at our company. He worked directly under me and I felt sorry for him. I really felt he deserved more than what he was getting. He had no qualifications or anything, but he’s picked everything up. He’s learned on the job as we’ve gone and he’s made a real success of it. I suppose you could say that’s compassion. And he’s one person I can really trust.” – Respondent 441*
- *“[My PA] had just had a miscarriage when I joined the company. So she was not in a good space. So I sat her down and said ‘Listen, I expect you to put yourself before the company. When you need the time off, you take it and you just let me know that you are off for the day or whatever, but do not put the company’s interests before mine. Go and look after your husband and your kids. Look after their interests first. And the thing that happened there – the results are amazing, because she is the most loyal PA to me. Ten o’clock in the evening, I’m stuck in Chang Hai. I need a flight home, because now I can’t take anymore. I’m sick. I phone her and she organises it. She goes far beyond the call of duty...” – Respondent 681*

From the quotations above, it is evident that most of the initiatives are driven by the participants themselves and that their efforts are often focused on one individual instead of on the entire organisation.

For the low IS respondents working in low OS environments where there is not much organisational compassion, one participant describes what needs to change in her organisation for the environment to be more spiritual and compassionate. She highlights the same elements already discussed:

“What needs to change for the organisation to become more compassionate? Management need to recognise that staff as human beings and individuals. They need to have more respect for people's private and family lives. There should be more clarity on roles and flexibility for staff to be able to deal with personal problems. Employees' feelings should be acknowledged and Management should communicate in a more respectful manner. Management should trust that employees can make the right decisions and do their jobs correctly and that they can behave ethically. They don't need to be reminded constantly to behave ethically. Just leave employees alone to do their jobs. It simply isn't necessary to micro-manage people all the time”. – Respondent 66

An unexpected sub-theme that emerges from the two themes on how to treat people in organisations and the characteristics of spiritual work environments, is that the size of the organisation actually plays a role in how it is experienced. It seems that most of the participants (both from the high IS and low IS hermeneutic units) are of the view that it is easier to create a spiritual work environment if you have a small team or small organisation and that large corporate environments present an obstacle to creating a spiritual work environment or experiencing spirit at work. These views are reflected in the quotations below:

- *“I actually saw an interesting documentary on Discovery about the sort of tipping point [once companies grow] to a certain point and everyone knew everyone else's name and everyone had a very personal, social connection with everyone else in the company and there is a tipping point when you lose connections like that and it starts turning into a rigid corporate environment and they had a very precise number of 160 employees. You can have a personal relationship with everyone in the company up to that point but after that, based on human interaction and social conformism, the company loses touch with everyone and you will get smaller groups of people who will then start to carry those social connections forward but they won't interact with other groups outside of that because there is too much to try and deal with from an individual interaction perspective” – Respondent 26 (high IS)*
- *“It's easier building meaningful relationships with five to ten people than having to build it with fifty people and I think again in larger corporates having mentorship models then becomes quite important where you actually put people under the wing of others...just to create a base where people can feel connected. So size can definitely become an obstacle if you don't manage it correctly.” – Respondent 259 (low IS)*
- *“Small organisations allow for collaboration and connection to be experienced. This is more difficult in a large corporation. That's when sub-cultures are formed on a smaller group level. Corporate culture can stifle creativity...So perhaps keep departments small so that people can still feel like a small organisation. In a small group, people can still make a difference.” – Respondent 201 (low IS)*

- *“It is easier to obtain cohesion and collaboration in a smaller organisation. It is almost impossible to do in a large corporate company. This is one of the reasons why he left the corporate space. A negative employee directly affects the bottom line. A small business cannot afford it. In a larger corporate, it is just filtered through the culture of the business and it is often not noticed.”* – Respondent 645 (high IS)

In this study, spiritual organisations are defined as organisations that have ‘soul’. Soulful organisations have organisational cultures that reflect caring leadership and socially responsible and value-driven business practices. These organisations recognise employees’ contributions to the success of the organisation and encourage individual development and wellbeing (Ashmos & Duchon, 2000; Guillory, 2000; Kinjerski & Skrypnek, 2006a, 2008; Mitroff & Denton, 1999). Thus, organisational spirituality is about actively creating a work environment that is conducive for experiencing meaningful work, finding and pursuing opportunities for personal growth and development and experiencing a connection or sense of common purpose with co-workers. High IS participants working in high OS environments describe the workplaces they work in as safe places to be in where they are allowed to express themselves or disagree with others, whilst at the same time, feeling like they are part of a family. There are strong interpersonal connections among employees in these organisations and a sense of trust, pride and achievement in the team. The organisational cultures in these organisations reflect respect for the individual and encourage open, honest and transparent communication as well as teamwork and collaboration. It seems logical that close family-type relationships and connection among team members is more easily attainable in smaller organisations with less employees than in large corporate environments.

2.2.3 Theme 3: The elements that characterise compassion

The third theme that emerges is the elements that characterise compassion and it describes what compassion means to the participants. Table 128 provides a breakdown of the preliminary codes that constitute the axial code ‘Compassion’ for both high IS and low IS participants. The numbers in brackets correspond to the number of times the code appears across the high and low IS hermeneutic units.

Table 128: Axial code ‘Compassion’

High IS Participants (Axial code frequency = 86)	Low IS Participants (Axial code frequency = 43)
Compassion and understanding for the individual (26)	Compassion and understanding for the individual (7)
Compassion is about understanding (17)	Compassion is about understanding (6)
Compassion is about respect (15)	Compassion is about respect (3)
Spend time with someone and listen to them (6)	Do not judge others (3)
Compassion is about being honest (3)	I am not an emotional person (3)
Do not judge others (2)	Compassion is an investment in someone (2)
I am not an emotional person (1)	Spend time with someone and listen to them (2)
	Compassion is about being honest (1)
	Compassion is showing mercy (1)
	Compassion is unconditional care (1)
	Fake compassion (1)

For both high IS and low IS participants, compassion means similar things as the same elements or ideas are highlighted by both groups of participants. In essence compassion comes down to *understanding* and *respect*. Both high IS and low IS participants also indicate that it is important to spend time with someone and listen to them, to not judge others and to be honest with people. However, there seems to be a heavier emphasis on these core elements with the high IS participants than with the low IS participants. Low IS participants seem to have a less intensive focus on these core elements. Low IS participants also highlight other factors like having mercy and having unconditional love for another person. These core elements are illustrated by the quotations from both high IS and low IS participants below:

- “*Compassion is a level of respect and that’s respect given without having to earn that respect and always considering all of the variables and the different options that may contribute to a person’s – if you are putting it in the context of a person – to that person’s existence and their situation and respecting that. Compassion also needs to have that level of understanding and I think it’s respect and understanding for people and their situations.*” – Respondent 26 (high IS)
- “*To be gentle. To be able to put yourself in someone else’s shoes and understand their actions and motivation even if you don’t agree with them*”. – Respondent 66 (low IS)
- “*Compassion is understanding the people you are working with and also the inadequacies that they may have. It can be from poverty to even people on higher levels of activity. It is to understand and having feeling towards their challenges as big or small as they may be.*” – Respondent 183 (high IS)

- *“Compassion means the ability to try and understand what someone else is going through and showing understanding and empathy. And kind of feeling what they’re feeling and identifying with it.” – Respondent 251 (high IS)*
- *“An understanding of people’s situations. You don’t necessarily have to agree with it, but you need to be able to display that you have kind of an understanding.” – Respondent 313 (high IS)*
- *“Compassion means to me the ability to understand the needs of others, the pain of others, the happiness of others and almost to share that as if that is your own happiness or pain or feelings. So it’s to really make a point of understanding how people feel.” – Respondent 645 (high IS)*

Respondent 750 (low IS) describes something he calls ‘fake compassion’. He explains:

“I think in South Africa we live with this fake, politically correct compassion where a lot of people use it without really understanding it. I think real compassion is not that much in your face. It’s more quiet. It has retained dignity. It exists. I select those areas which I believe deserve mercy and it’s my judgement and nobody else’s. I don’t show mercy as a general rule. I’m quite selective. Like a good farmer would be selective of the soil on which he plants his seeds. I use my values to judge, because I wouldn’t know on what else to judge it. I pick those where I see fertile soil. If they have potential, I will invest in them.”

Respondent 750 is the only participant to indicate that he is selective with his compassion and that he does not show compassion to everyone. This seems to almost contradict the ideas highlighted above about what compassion means.

Participants emphasise that *compassion without practical action is not real compassion*. This theme therefore also describes how participants demonstrate compassion practically in their lives. The following quotations below illustrate how participants demonstrate compassion practically in their own lives. The compassionate acts they describe again illustrate understanding and respect and being honest with people:

- *“I work at a home for abused young girls and girls who have been taken off the streets as prostitutes and we go and sit with them and work with them and help improve their lives to the point of getting them all into an education system and then building a career for them. That for me is a real example of having compassion.” – Respondent 183 (high IS)*
- *“Compassion means being able to make a practical difference. Just expressing that you feel sorry for others does not make much of a difference to those who really need help...If I can make a practical difference, I*

will help out...So I will mentor or coach or give money...That is why I serve on our residential estate's body corporate. I have taken staff to hospital and paid their legal fees...practical things... – Respondent 201 (low IS)

- *"I work at a place of safety for abandoned babies and babies that have been put up for adoption or removed from their homes for various reasons – drug and alcohol abuse or general neglect or suspected child trafficking. We are basically an emergency place of safety that takes care of the babies while the social workers are doing their investigations and looking for foster care or adoptive parents."* – Respondent 251 (high IS)
- *"I'm currently involved in an Article 21 company. For me it's very bad to see young people take their lives for no apparent reason or that at their age, they feel that there's no way out so we've created this Article 21 company to actually help achieve change in the minds and attitudes of youth and we do that through the detention programs at schools."* – Respondent 259 (low IS)
- *"I'm not one to say sorry your dog died or sorry your mom died. But I do a whole lot. I express it by...my wife's just lost her father. I say get over it. Get on with it, you know. But I'll do a whole lot. So I will cook extra meals and I will do more kids lifts and I will do all kinds of things, but I'm probably not giving her the hug and the kiss that I should be giving her. I'm very service-orientated."* – Respondent 395 (high IS)
- *"Compassion means honesty. Sometimes when we feel sorry for someone, we are not honest with them and if you cannot be honest with someone, you are not being helpful. If I think that someone is being the author of their own demise, I will tell them so honestly. So for example, I have this lady who works for me. At some point she was working 18 hours a day and probably neglecting her family. She asked for my advice on the matter and mentioned that her husband was complaining about her neglect of the family. She was probably hoping for some confirmation from me, but I was honest with her. I encouraged her to do a reality check and to start putting some boundaries in place"* – Respondent 550 (high IS)

Clinical research has mostly focused on the psychology of human suffering. However according to Seppala (2013), suffering, however unpleasant, also has a bright side that research has paid less attention to – compassion. Seppala (2013) explains that there are a number of examples where human suffering is accompanied by beautiful acts of compassion from others who wish to help relieve their fellow humans' suffering. Compassion seems to come naturally to humans and Seppala (2013) believes that compassion is hugely beneficial to our overall physical and mental health and wellbeing. The fact that both high IS and low IS participants emphasise the same elements that constitute compassion can perhaps be taken as an indication that

compassion does come naturally to humans and that most people intrinsically understand what compassion means. The descriptions of practical acts of compassion by participants highlight how participants give freely of their time mostly with the aim of making a difference to another person. The desire to make a difference surfaces again in the next theme.

2.2.4 **Theme 4: The elements that lead to participants experiencing energy and vigour at work or in their work**

The fourth theme that emerges is the elements that lead to participants experiencing energy and vigour at work and in their work and relates to the things that lead to participants feeling energised and invigorated at work or by their work as well as the things that inhibit their ability to feel energised and invigorated at work or by their work. Table 129 provides a breakdown of the preliminary codes that constitute the axial code ‘Energy and Vigour’ for both high IS and low IS participants. The numbers in brackets correspond to the number of times the code appears across the high and low IS hermeneutic units.

Table 129: Axial code ‘Energy and Vigour’

High IS Participants (Axial code frequency = 45)	Low IS Participants (Axial code frequency = 31)
Making a difference (17)	Making a difference (8)
Making a contribution (10)	I enjoy the challenge (4)
I want to add value (5)	I am energised by finding solutions to problems (3)
I enjoy the challenge (4)	I want to add value (3)
I love what I do (4)	Making a contribution (3)
Spread positive energy to the team (2)	I am no longer passionate and excited (2)
I feel excited about work on most days (1)	I feel excited about work on most days (2)
Live with passion (1)	I love what I do (2)
Stay away from negative people (1)	Only a small part of my work is exciting (2)
	Live with passion (1)
	Positive feedback makes me feel energised in work (1)

From table 129, it is evident that for high IS participants, making a difference or a contribution or the desire to add value is what energises and invigorates them most in their work. Making a difference and making a contribution is mentioned most often by these participants. Some high

IS participants also indicate that they enjoy a good challenge and that they really love what they do. The views of high IS participants are reflected in the quotations below:

- *“To add value to both myself and my immediate family. It starts there. And then to add value to the environment that I operate in. If I am not adding value then I move on to somewhere where I can add value. My whole career has been built around where I can make a difference.”* – Respondent 183
- *“...just to see the impact that it’s having and also just to be valued by the people around you and to know that what you are doing is having a positive effect and adding value”* – Respondent 251
- *“Knowing that the kind of work that we do that we are making a difference”* – Respondent 313
- *“My work gives me a high. It is difficult you know, because you take a klap regularly...clients are not easy and often there is not a sweet victory; you have to settle...find a compromise, a way forward...but when we work together as a team and there is team success and when you are working together with good people it is great...”* – Respondent 395
- *“I want to mean something to people and make a contribution towards their growth and their happiness and their wellbeing because I believe that is the main reason why we are on this earth.”* – Respondent 645

For low IS participants, making a difference is also key to them feeling energised and invigorated by their work. However, for them it is more about taking on a challenges or finding solutions to problems. Some low IS participants are also energised and invigorated by the opportunity to add value or make a contribution to a cause. The views of low IS respondents are reflected in the quotations below:

- *“We are passionate about our projects and doing work differently where you can actually solve problems by applying project management principles...For me money is no motivator. If you use money as a motivator, it’s short-term. I need to be happy in what I do and contribute towards my country and my staff. I don’t think I would do anything different to what I’m doing now, even if I have money. Maybe I’ll give up more money, I don’t know. But for me, I’m not doing this because I wanna get rich. You work as best you can, not to achieve a financial reward, but to make a difference”* – Respondent 259
- *“There are days that I walk out and I literally go ‘Yes! This has gone well. The client was engaged; we’ve exchanged information, we’ve had a good debate; I know that what I said and did was relevant and valid and on-point and knowledgeable’...and that for me is energising. It inspires you to do it again...Personally, I’m doing what I love, but I could be doing this at any other organisation. But I do think my work makes a*

difference. The impact I have on others...that to me, is massive. I do believe that I'm making a difference. I have to believe that, otherwise I wouldn't get up in the morning..." – Respondent 66

However, what is striking is that some IS participants indicate that they no longer feel excited and passionate about their work or that only a small part of the work they do, energises and invigorates them:

- *"I just remember the difficult times. You stress a lot when you run a business. You have to stay afloat and you have to try and be creative. I used to be much more excited and enthusiastic when I was younger"* – Respondent 201
- *"There's a lot of things that go into getting a big order out and that is very stimulating...The design part of my job is probably less than twenty percent but the bit that I do...to see something that you have done and you have produced...it's satisfying and I enjoy seeing the positive result. I started off in this industry forty years ago and I still enjoy it now."* – Respondent 441
- *"That's a difficult question to answer because with progressive age it changes, ja"* – Respondent 750

None of the high IS participants express a lack of feeling energised, positive or invigorated. In fact, there is mention of spreading positive energy to the team and feeling excited on most days as well as living with passion. One high IS respondent indicates that he makes a point of avoiding negative people so that he is able to stay energised and focused in his work. These views are expressed in the quotations below:

- *"I feel excited about work on most days...You know, I come to work with a lot of energy and I kind of spread that around as much as I can...When we get new clients on board or we get a big project, that's exciting 'cause it's validation of what we're doing here is working. So that's always a high point"* – Respondent 26
- *"Life, hey. The challenges of life. Every day at work is a challenge. I'm stimulated and excited about it as I'm also excited when I get home and I see my kids and I take my dog for a walk or I get on my bicycle or I go on holiday. I'm a life enthusiast, because you only live once, hey"* – Respondent 395
- *"I'm a very positively inclined person. I always see the rays of sun in a forest instead of the darkness and I believe I must not surround myself with negative people, because I believe they contaminate you."* – Respondent 645

Respondent 441 (low IS) explains that for him it is about obtaining positive feedback about his work, before he is able to feel energised and invigorated.

"Maybe less problems to solve (laughs). Maybe some positive feedback. That helps. But I don't know."

This theme illustrates that for some individuals (in particular high IS participants) the energy or the drive comes from within and there is a desire to spread the positive energy whilst for some of the low IS participants, they only feel energised if they are able to find solutions or when they receive positive feedback; so their energy is determined by outside forces.

2.2.5 Theme 5: The elements necessary for connection to be experienced

The fifth theme that emerges is the elements necessary for connection to be experienced. This theme is aimed at answering the question: what is required for participants to experience a connection with another person? It lists the elements that serve as pre-requisites for experiencing a connection with someone. Table 130 provides a breakdown of the preliminary codes that constitute the axial code 'Connection' for both high IS and low IS participants. The numbers in brackets correspond to the number of times the code appears across the high and low IS hermeneutic units.

Table 130: Axial code 'Connection'

High IS Participants (Axial code frequency = 39)	Low IS Participants (Axial code frequency = 20)
Connection is about empathy (9)	Be authentic with others to connect with them (5)
Connection is about understanding (9)	Find common ground for connection (5)
Be authentic with others to connect with them (7)	Sharing common values for connection to be possible (4)
Quality time is necessary for connection (3)	Connection is about communication (3)
Special connection with friends (3)	Connection is about trust (2)
We are all interconnected (3)	Connection is about understanding (1)
Connection is about head and heart (2)	
Find common ground for connection (2)	
Sharing common values for connection to be possible (1)	

For high IS participants, connection is about *empathy* and *understanding*. High IS participants believe that you have to be *authentic* with another person in order connect with them. It is

important to be yourself and to allow the other person the space to be who they are if you are to truly connect with them. Furthermore, high IS participants mention that spending quality time with someone is a necessary pre-requisite for establishing a real connection with that person. These views are highlighted in the quotations from high IS participants below:

- *“For a meaningful connection to be experienced there needs to be an understanding of that person and what their needs are and also I suppose a common ground in some respects. Although, for me that is not a bigger requirement than understanding their needs and who they are as a person.”* – Respondent 26
- *“For me it’s all about empathy and a connection, if I can make it simplistic, is thinking not only with the head, but with the heart as well and the combination of the two is what links me to people. You need to get to know the person you are interacting with.”* – Respondent 183
- *“...Quality time with no distraction. I think just not taking each other for granted and spending time together and finding stuff that you’ve got in common and that you enjoy. That’s the most important.”* – Respondent 251
- *“I think it’s about the individual. Sometimes we don’t really look at what makes us click. I think every person is different. So it’s about being comfortable and being yourself; being allowed to do that.”* – Respondent 313
- *“Connection happens when you are sharing something with someone else and learning from the other person what they value and what is important to them”.* Respondent 681

The importance and value of connection for human health and wellbeing has been emphasised more recently (Lieberman, 2013; Paul, 2013; Smith, 2013). A lack of social connection seems to have a greater detrimental effect on our overall health than obesity, smoking, and high blood pressure; whereas strong social connections have been linked to a 50 percent increase in longevity (Seppala, 2013). The need for understanding as a key element to effective connection and communication was probably best illustrated by Covey’s (1994) fifth habit: ‘seek first to understand, then to be understood’. For high IS participants, the need for understanding seems to be a critical requirement for connection.

For low IS participants on the other hand, authenticity and finding common ground are mentioned as the most important elements to establishing a connection with another person. Low IS participants highlight that it is easier to connect with someone who has similar values.

For them, connection is more about clear communication and trust than understanding. These views are illustrated by the selected quotations from low IS participants below:

- *“For me, connection is all about being with people...it’s about having that intimate relationship with somebody where you can share everything; where you can be who you are and not worry about being judged because you are completely accepted for who you are. For connection to be present, it requires: communication; some form of mutual attraction – be that physical or in the sense that you feel you have something in common, you are coming from the same place and trying to achieve the same goals. And I think trust, integrity, honesty, the same value system or morals – all of that for me is important”* – Respondent 66
- *“I only have a few very deep connections. The rest are very much professional or friendly or whatever the case may be. I think trust is required. In most cases it relates to trust and to opening up on both sides. For a meaningful connection to be experienced, you must share similar views or have common interests”* – Respondent 259
- *“When I talk to somebody, I sense very quickly if I am going to have a connection. I do it a lot in business, because I deal a lot with customers. I find it important to have relationships between myself and other people. I would say in most cases, probably as much as seventy-five percent I find that I can in fact quite quickly find some common ground between myself and another person. But there are occasions where there is some sort of stand-off; where there is no commonality whatsoever...”* – Respondent 441

It is interesting to note the difference between the approach followed by high IS participants and the approach followed by low IS participants. High IS participants seek to *understand* another person in order to connect with them; so the responsibility lies with them to establish the connection – even in the absence of some form of common ground or similar values. Low IS participants seek common ground or similar values; so the responsibility for connection is more evenly distributed. They will only connect with another person if they find something in common, which could mean that they might not try as hard to understand or connect to someone who has very different values or perspectives.

2.2.6 Theme 6: Core values espoused by participants

Participants were asked about their values and which values drive their behaviour. The sixth theme that emerges is the core values that participants espouse and that guide their decisions and actions in life and work. These values are considered espoused values, as the participants

describe the values that are important to them, but there is no way for the researcher to confirm to what an extent the participants actively enact these values in their daily lives. Table 131 provides a breakdown of the preliminary codes that constitute the axial code ‘Core Values’ for both high IS and low IS participants. The numbers in brackets correspond to the number of times the code appears across the high and low IS hermeneutic units.

Table 131: Axial code ‘Core Values’

High IS Participants (Axial code frequency = 33)	Low IS Participants (Axial code frequency = 19)
Values – Honesty (7)	Values – Honesty (3)
Values – Integrity (5)	Values – Integrity (3)
Values – Transparency (4)	Values - The Golden Rule and being a good person (2)
Values – Trust (4)	Values – Trustworthiness (2)
Love is the most important value (3)	Love is the most important value (2)
Values – Excellence (2)	Values – Compassion (1)
Values – Professionalism (2)	Values - Do not steal (1)
Success starts at home (1)	Values - Do the right thing (1)
Values – Authenticity (1)	Values – Excellence (1)
Values - Do the right thing (1)	Values – Passion (1)
Values – Kindness (1)	Values – Professionalism (1)
Values – Respect (1)	Values – Respect (1)
Values - The Golden Rule and being a good person (1)	Values – Trust (1)

From Table 131, it is evident that both high IS and low IS participants expressed very similar values. For both high IS and low IS participants the two most important values they espouse to is honesty and integrity. This is reflected in the quotations from both high IS and low IS participants below:

- “Honesty, absolutely and trustworthiness...so honesty is very, very important to me” – Respondent 66 (low IS)
- “I think just being a good person and helping in whichever way you can and putting family first and integrity – doing things with integrity and honesty...ja those would be the most important. You are remembered for how you treat others and not for how much money you make and what car you drive.” – Respondent 251 (high IS)

- *“Integrity. I think that’s one of the things that’s most important for me. My yes needs to be my yes and my no needs to be my no and people need to trust what I’m saying. So if I’ve promised you something, I need to deliver on it. For me integrity is core.”* – Respondent 259 (low IS)
- *“Honesty and integrity is a non-negotiable in everything you do. I don’t do white lies. I want absolute transparency.”* – Respondent 395 (high IS)
- *“My values are also the values that I have introduced into the business...Honesty, is the first one...”* – Respondent 550 (high IS)

Other values espoused by high IS participants include:

1) Transparency, openness and trust:

“Openness is the next one – it makes you vulnerable because you are at risk, but when you are vulnerable and open to risk, you give other people permission to do the same as well...Truthfulness, trust, transparency... Those are at the core of how we behave...” – Respondent 550

2) Love:

- *“There are universal values. The most important value is love. If you live love properly then there is actually very little room for wrong in that and if you do wrong is to learn from an experience and to know that the next time you encounter that situation there is a choice and it’s all about choices.”* – Respondent 26
- *“I believe that you must love everybody. I see the good in every person, until they disappoint me; then I just walk away.”* – Respondent 645

3) Excellence and professionalism:

“And then professionalism...I have an ethic in my own life that I want to do everything that I do with excellence...Lastly, with regards to professionalism, if we expect people to treat us with professionalism, I need to ensure that I do the same thing in my life and the lives of those people that I can potentially touch.” – Respondent 550

Other values espoused by low IS participants include:

1) The golden rule:

“I think simple nature law: treat people how you would like to be treated. It will solve a lot of problems or even make sure a lot of problems wouldn’t even arise” – Respondent 750

2) Trustworthiness:

“Whenever you commit to something, fulfil it, even if it costs you your life. Think before you make a promise, but once you give an undertaking, deliver. The only thing in the end that we’ve got is our

reputation and our name. We are not soiled by stupid actions, mediocre actions. We have to keep it pretty clean, because if we manage to do that our whole life long, people will always manage to believe in us. People will always seek our consult and will always predominantly be well disposed towards us.” – Respondent 750

Both high IS and low IS participants expressed very similar values. Many of the values mentioned by participants also reflect what could be considered universal values. A value is considered to be a universal value if it has the same value or worth for all, or almost all, people (Schwartz, 1992). Some universal values include truth or honesty, justice, respect, humility, selflessness, responsibility, care, connectedness, service, compassion, tolerance, forgiveness, non-violence and caring for other living things and the environment (Kinner, Kernes & Dautheribes, 2000). The most important universal values mentioned by the participants include: honesty and integrity, respect, transparency, trust, love, compassion and kindness. The golden rule of treating others how you would like to be treated is also mentioned by both high IS and low IS participants.

The significant difference in the axial code frequency between high IS and low IS participants indicate that high IS participants are more likely to talk about their values than low IS participants. However, a clear distinction cannot be drawn between high IS and low IS participants based on their values, since the values they mention are often the same. Furthermore, these values are the values that participants espouse. Unfortunately, there is no way for the researcher to confirm whether these espoused values are enacted by participants in their daily lives. Often values espoused digress from values enacted and this could perhaps have been the distinguishing factor between high IS and low IS participants. The only conclusion that can be drawn here, is that there is a greater emphasis on values with high IS participants than with low IS participants.

2.2.7 Theme 7: Corporate Social Investment (CSI) initiatives

The seventh theme that emerges is corporate social investment initiatives by the organisations that participants work in and whether participants perceive that their organisations contribute to a greater purpose. Table 132 provides a breakdown of the preliminary codes that constitute the

axial code ‘CSI initiatives and contributions to a greater purpose’ and describes the corporate social investment initiatives undertaken by the organisations that the participants work in and how they think their organisations are contributing to a greater purpose. Table 132 provides the codes for both high IS and low IS participants. The numbers in brackets correspond to the number of times the code appears across the high and low IS hermeneutic units.

Table 132: Axial code ‘CSI initiatives and contributions to a greater purpose’

High IS Participants (Axial code frequency = 32)	Low IS Participants (Axial code frequency = 30)
Opportunities for growth and development (8)	The goal was to make money (9)
Practical CSI initiatives (6)	The organisation does not contribute to a greater purpose (6)
Get staff involved in CSI initiatives (5)	CSI is not the goal. The company should not be expected to do more (5)
It is not about money (5)	Opportunities for growth and development (4)
Emphasise service in everything we do (3)	We adhere to policies (3)
The goal was to make money (3)	It is not about money (1)
Show employees that you are giving back (2)	Show employees that you are giving back (1)
	The organisation is selfish and arrogant (1)

High IS participants indicate that their organisations provide them with opportunities for growth and development. This seems to be the organisations’ biggest contribution to a greater purpose other than simply making a profit. Participants with high IS mention that their organisations are involved in the community and participate in corporate social investment (CSI) projects or specifically trade for non-profit reasons. They also encourage staff to get involved in the CSI initiatives. Furthermore, high IS respondents also consistently indicate that in their organisations, it is not just about making money; there is a greater purpose in the organisation. This is interesting because as indicated in Table 123, those who score high on IS also tend to score high on OS and SAW indicating that they perceive their organisations to be spiritual and they experience spirit at work. In this study, spiritual organisations are defined as organisations that have ‘soul’. Organisations that have soul embrace both the top line (higher purpose of the organisation) and the bottom line (financial performance) (Kinjerski & Skrypnik, 2004). Soulful organisations have organisational cultures that reflect caring leadership and socially responsible and value-driven business practices. These organisations recognise employees’ contributions to the success of the organisation and encourage individual development and

wellbeing (Ashmos & Duchon, 2000; Guillory, 2000; Kinjerski & Skrypnek, 2006a, 2008; Mitroff & Denton, 1999). The high level of OS in the organisations that high IS participants work in is clearly illustrated by the quotations below:

- There is service in everything they do and then also on a social responsibility level; there is a huge contribution to social responsibility. And that's not just saying we will give x percent of our profits to charity, it's getting staff involved; getting people individually connected to people who can benefit from having someone support them, someone giving them guidance. Making a decision to make a thousand sandwiches and going to deliver them. On Mandela day each year, the company buys ingredients and the staff stand for hours and make sandwiches that are then delivered to the homeless in the area. The company also has a foundation where staff can donate money, items or time when required. The foundation support foster children and assists with their education. Many of the staff come through on Saturday mornings and give of their time, knowledge and skill to educate the kids in the foundation and to contribute to them in whichever way they can" – Respondent 26*
- "I was in the private sector for most of my career. I felt that it was very clinical decision-making where people were not being thought about. The work we do here is all about improving and maintaining standards for people in the workplace. So it touches on the very emphasis on what I believe in in terms of compassion and empathy. What we do, is we go into countries and help and sometimes even pressure companies to lift their game in terms of standards for people in the world of work. The company deals with youth employment, gender issues, child abuse and child labour...all the negative stuff...we deal with that; we try and stop it or eradicate it and on the other hand we try and help develop" – Respondent 183*
- "I work at a place of safety for abandoned babies and babies that have been put up for adoption or removed from their homes for various reasons – drug and alcohol abuse or general neglect or suspected child trafficking. We are basically an emergency place of safety that takes care of the babies while the social workers are doing their investigations and looking for foster care or adoptive parents" – Respondent 251*

In contrast to high IS' focus on opportunities for growth and development, low IS participants consistently indicate that the primary goal in their organisations, is to make money. They mention that their organisations do not contribute to a greater purpose. There are no community or CSI initiatives in these organisations as CSI is not the goal. Although these organisations also provide opportunities for growth and development, there is not as much emphasis on this as with the high IS participants and mostly they simply adhere to policies or the minimum legal requirements. One participant goes as far as saying that the organisation is arrogant. Again, this is interesting, because as indicated in Table 123, those who scored low on IS also scored

low on OS and SAW and thus these participants do not perceive their organisations as being spiritual and they do not experience as much spirit at work. Similarly therefore, the lower level of OS in the organisations that low IS participants work in is clearly illustrated by the quotations below:

- *“The organisation does not contribute to a greater purpose. There is nothing special about this organisation. There is no transparency, no respect and no understanding. The work environment is toxic and people are treated like robots. There is insufficient manpower to get the work done...”* – Respondent 66
- *“The organisation does not support CSI initiatives. I do not believe that an organisation has any other responsibilities other than making money. The company’s biggest contribution is to the economy by helping the GDP and creating employment opportunities”.* – Respondent 201
- *“Look we are a very commercial type of company...We are there to actually make money. We are not there to benefit mankind. We are simply trying to make money. What we do do though, is we test equipment at the SABS. Now we could get by without doing that, but what we are trying to do is to comply with international standards.”* – Respondent 441
- *“You have this arrogance creeping through the organisation”* – Respondent 681
- *“We give our staff the knowledge they need to conduct their work effectively and we supply whatever tool or know-how is needed but since ever I run a company, I try to introduce to them certain life wisdoms. So I have speakers and I try to speak myself so that it is understood in a very simple way relevant to their life, ja...But the company does not participate in CSI initiatives. The only goal is to make money.”* – Respondent 750

From these quotations a clear distinction can be drawn between the organisations that high IS participants work in and the organisations that low IS participants work in. High IS participants experience their organisations as spiritual (with high OS) and describe ‘soulful’ organisations that encourage personal growth and development and that actively participates in CSI initiatives. These organisations thus embrace both the top line (higher purpose of the organisation) and the bottom line (financial performance) (Kinjerski & Skrypnek, 2004). What is striking is how these organisations actively work at getting employees involved in their CSI initiatives. On the opposite of this continuum, low IS participants experience their organisations as non-spiritual workplaces (with low OS) and describe organisations that value money more than anything. The focus is on making profit and CSI initiatives are either not supported or only

supported as far as they are legally required to be supported. This is a very different work environment to those described by the high IS participants.

2.2.8 **Theme 8: The elements required for effective collaboration in organisations**

The eighth theme that emerges is the elements required for effective collaboration in organisations and describes what collaboration is and which elements participants view as necessary for them to effectively collaborate with others in their organisations. This theme highlights how collaboration among people in an organisation is accomplished. Table 133 provides a breakdown of the preliminary codes that constitute the axial code 'Collaboration' for both high IS and low IS participants. The numbers in brackets correspond to the number of times the code appears across the high and low IS hermeneutic units.

Table 133: Axial code 'Collaboration'

High IS Participants (Axial code frequency = 26)	Low IS Participants (Axial code frequency = 17)
Ask for input from staff (8)	Ask for input from staff (5)
Collaborative decision-making for the greater whole (7)	Set clear and specific goals to ensure collaboration (4)
Set clear and specific goals to ensure collaboration (4)	Collaboration is based on a shared purpose (3)
Collaboration is based on a shared purpose (3)	Collaborative decision-making for the greater whole (2)
Staff meet regularly (3)	Staff meet regularly (2)
A negative employee affects the bottom line (1)	Collaboration is about customer satisfaction (1)

From Table 133, it is evident that both high IS and low IS participants described the same elements for ensuring connection and collaboration in their organisations:

- 1) Ask staff for input – mentioned eight times by high IS participants and five times by low IS participants
- 2) Encourage collaborative decision-making – mentioned seven times by high IS participants and twice by low IS participants
- 3) Set clear and specific goals – mentioned four times by both high IS participants and low IS participants

Both high IS and low IS participants indicate that collaboration is based on a shared purpose and that their staff meet regularly to ensure effective collaboration. High IS participants emphasise that a negative employee could affect the bottom line and it is therefore important to ensure that everyone is on the same page and that complaints or concerns are addressed effectively. The ideas of high IS participants are reflected in the quotations below:

- *“We get on extremely well. We have the kind of relationship where if someone doesn’t agree with the decision that I’m making, they would say I don’t agree and I have in turn the respect to say, ok I accept that you don’t agree; let’s talk about it and come to a consensus on the best decision for the division and for the greater good, you know. So ja, the team is mature and have good decision qualities. You know I respect their input and their opinion so a lot of decisions are made as a collaborate decision rather than I’m the boss and I say what goes. And that’s kind of the way it works throughout the organisation. There is a decision and yes, the MD and the CEO have greater impact on what decisions get pushed forward, but there’s always an open ‘how do you guys feel about this?’” – Respondent 26*
- *“It is easy for people to connect and collaborate, because it is a small organisation. There is close interaction between the team. The team has a common purpose and there is open communication.” – Respondent 251*
- *“It is easier to obtain cohesion and collaboration in a smaller organisation. It is almost impossible to do in a large corporate company. And the reason is that I know that a negative employee directly affects the bottom line...You can’t afford for an employee not to pull his weight for an hour even. So it’s important to keep them motivated; to get involved in their feelings; to show compassion and to create cohesion so that they understand ‘if I don’t do my job, the company is going to suffer and the other people may lose their jobs or the company may even go under.” – Respondent 645*

The ideas of low IS participants, are reflected in the quotations below:

- *“We’re all striving for sort of the same thing. You know there’s always going to be an exception to the rule. There’s always gonna be someone who doesn’t pull their weight...But on an everyday basis, there is a personal interest in getting the job done correctly.” – Respondent 66*
- *“The only way to create cohesion is to ensure that people work for a cause. They are more likely to feel close to each other when they work for the same cause.” – Respondent 201*
- *“On a monthly basis we have a feedback session. We all get together for 10 minutes – it doesn’t take more than 10 minutes – we tell them what’s happening in the market, because people work together if they have a common enemy. It’s a tribal thing. So we tell them what the competitor is winning in the market, what we are tendering in the market and how we’re gonna get it. Then they’re informed... When people just talk to each*

other, it makes you share the common goal of the company and you get everybody on the same page.” – Respondent 681

Team work and collaboration has become an important element for businesses to remain competitive in the contemporary world of work as evidenced by articles on the topic of organisational collaboration in both the Harvard Business Review (Adler, Heckscher & Prusak, 2011; Benkler, 2011; Ibarra & Hansen, 2011; Tierney, 2011) and Forbes (Morgan, 2013). Adler et al. (2011) argue that for organisations to be innovative in the contemporary world of work, they need a lot more than mere compliance and cooperation. Rather, it is imperative that they encourage organisational collaboration on all levels of the organisation as this is the only way to “*innovate fast enough to keep up with the competition*”; whilst trying to keep customers happy and improving cost and efficiency (Adler et al., 2011, p. 101). In their view true organisational collaboration is reflected in a culture of trust and teamwork towards a shared purpose. Two of the three elements – i.e. teamwork and shared purpose – have been highlighted by the interviewees as elements of collaboration in their organisations.

2.2.9 Theme 9: The elements that contribute to participants’ personal meaning in life

The ninth theme that emerges is the elements that contribute to participants’ personal meaning in life. Table 134 provides a breakdown of the preliminary codes that constitute the axial code ‘Personal Meaning’ for both high IS and low IS participants. The numbers in brackets correspond to the number of times the code appears across the high and low IS hermeneutic units.

Table 134: Axial code ‘Personal Meaning’

High IS Participants (Axial code frequency = 24)	Low IS Participants (Axial code frequency = 18)
Work gives me personal meaning (8)	Work gives me personal meaning (6)
Family gives me personal meaning (6)	Personal meaning is about making a difference (4)
Family is important (6)	Family gives me personal meaning (3)
Personal meaning is about making a difference (4)	Family is important (3)
	Creating something new gives me meaning (2)

From table 134, it appears that both high IS and low IS participants highlight the same three elements that contribute to their personal meaning in life:

- 1) Work – mentioned eight times by high IS participants and six times by low IS participants
- 2) Family – mentioned six times by high IS participants and three times by low IS participants
- 3) Making a difference – mentioned four times by both high IS and low IS participants

Another element that is only mentioned by low IS participants, is creating something new.

Examples of these elements are contained in the quotations from high IS participants below:

- *“I suppose a sense of contribution...a sense of achievement and being able to contribute to the greater good of my own personal experience as well as other people’s experiences” – Respondent 26*
- *“To add value to both myself and my immediate family. It starts there. And then to add value to the environment that I operate in. If I am not adding value then I move on to somewhere where I can add value. My whole career has been built around where I can make a difference” – Respondent 183*
- *“My family, my children, the work that I do and my general involvement in my community” – Respondent 251*
- *“I suppose it’s family and my work and friends.” – Respondent 313*
- *“What gives me meaning, is in the first instance to really understand why I’m here, what my purpose on earth is...whatever it is that you are busy doing should be in fulfilment of your purpose and that purpose for me as I stand here today, is to be able to provide input into the lives of other people to improve their life and improve their situation...to have the opportunity or the ability to change or touch the life of one person one day at a time. That for me, gives life meaning...The other element of life that gives me purpose and that gives life meaning, are the relationships that one has the opportunity to develop.” – Respondent 550*
- *“Meaning in my life means I must be able to do something that can enhance the quality of life of people. I want to mean something to people and make a contribution towards their growth and their happiness and their wellbeing because I believe that is the main reason why we are on this earth. Second to that is career achievement... In my private life, I believe that for me personally, I have to be a good husband, I have to be a good father for my two children and I have to be a great grandfather for my grandchildren. That’s important. And it links with my desire in life to mean something to people” – Respondent 645*

Additional quotations from the low IS participants’ are provided below:

- *“For me it’s about being able to help others and being able to pass on knowledge and watch individuals grow in the sense that they are furthering their lives and their careers and I’m part of that and that, for me, is very special. At the same time I’ve become a new mom and my priorities have changed and... you know...being a family person also gives me a lot of meaning”* – Respondent 66
- *“I’m a creative person so creating something new gives me immense pleasure. To do something new that no-one else has done before.”* – Respondent 201
- *“Work and family as well as making a difference”* – Respondent 259
- *“My family is very important to me. Watching my children achieve is something that I find very important. Having been able to support them and put them through university has added a lot of meaning to my life and therefore my job is important to me as well”* – Respondent 441
- *“To be on the side of creation as opposed to destruction.”* – Respondent 750

These findings correspond with the findings from other researchers who have indicated that, in the contemporary world of work, work has become critical to people finding meaning in life and that people are seeking to find a greater sense of meaning or purpose from their work (Bullen, 2011/2012; Geh & Tan, 2009; Geldenhuys et al., 2014; Kendall, 2012; Marschke et al., 2011; May, 2014; Mitroff, 2003; Sendjaya, 2015). What is striking is the desire to make a difference or to add value. This desire is equally important to both high IS and low IS participants as significant to their personal meaning in life. Making a difference and finding meaning in what we do seems to be a fundamental human need (Frankl, 2004).

2.2.10 Theme 10: Characteristics of non-spiritual work environments

The tenth theme that emerges is the characteristics of non-spiritual work environments. The axial code that this theme is based on, is *only* mentioned by low IS participants (see table 125). This is also the reason why it is necessary to discuss this theme. Most of the low IS participants also have low OS scores (see Table 123). Table 135 provides a breakdown of the preliminary codes that constitute the axial code ‘Characteristics of Non-Spiritual Work Environments’ for low IS participants. None of the initial codes categorised under this axial code applies to high

IS participants. The numbers in brackets correspond to the number of times the code appears across the low IS hermeneutic unit.

Table 135: Axial code ‘Characteristics of Non-Spiritual Work Environments’

Low IS Participants (Axial code frequency = 19)
Employees are not robots (3)
Management expects too much (2)
The organisation is not transparent (2)
There are not enough resources (2)
There is a lack of transparency (2)
Dictatorial leadership style (2)
Do not allow cowards to lead (1)
I can do my work anywhere. I don't need to be here. (1)
I create my own life purpose without the organisation (1)
I do not want to sacrifice quality time with my family for work (1)
My boss is incompetent (1)
There is no communication in the organisation (1)
There is no connection in the organisation (1)

The key issues mentioned by low IS participants regarding their work environments are all negative oriented, including that employees are treated as machines; that management expects too much of their staff; the organisation is not transparent and there are insufficient resources to get the work done. These ideas are reflected in the quotation below:

“I don’t feel that this company is transparent. I don’t feel that they necessarily have the best interests of their employees at heart. I think they’re more business-orientated – which I understand, because they’re running a business – but at the same time, employees are not robots. We cannot simply be made to do things as and when you choose that they need to be done. We have families, we have lives and a lot of us are trying to live a life which is says that I work to live, not the other way around. You know, I don’t want to spend my whole day working. I don’t want to have to sacrifice quality time with my family, my friends and my own recuperation time and relaxation time, because I’m constantly stressed about what needs to happen at work. I don’t think in terms of manpower that there’s enough manpower... There is a huge gap between staff and management. There is no connection. Management have unfair and unrealistic expectations. The lack of transparent communication from senior management is directly contributing to the lack of connection in this organisation. Decisions are made without considering employees.” – Respondent 66

Some participants emphasise that there is a lack of transparency and sometimes leaders are viewed as arrogant and incompetent, as illustrated in the quotation below:

“Our company was bought over by a German competitor and now you have this arrogance creeping through the organisation. The take-over company is a pure German company and arrogant like you can’t believe...I’m the only candidate that can do the job, but the German company insists that we should have this other idiot there as well. He doesn’t even understand what we do and I had to give him a lecture on finance yesterday, because he doesn’t understand the difference between invoicing, revenue and profit. So I’m not at all pleased with the structure above me and I will exit the company in the next six months, because I can’t put up with that...And you can only stomach this sort of abuse for so long.” – Respondent 681

Leaders are often also described as having dictatorial leadership styles. In fact, one leader describes himself as applying a dictatorial leadership style in his organisation:

“My leadership style...partly dictatorial...Oh yes. On a ship there is not eighteen captains, there’s one captain and there is not a flexible distribution of responsibility. There’s a very certain distribution of responsibility. Remuneration is exactly according to performance...I have a very well trained staff...But I’m also task master, because if you want in the end to have incredible customer satisfaction – which is your client tomorrow, ja – work amounts to big business, you cannot be slack. You must value the customer’s money and must honour promises and you cannot deliver when you have a slack troop. Your troop must be well disciplined people of good spirit. And I make sure of that.” – Respondent 750

Benkler (2011) believes that it is organisations’ responsibility to encourage collaboration and cooperation among staff. He suggests that organisations should move away from using controls (i.e. carrots and sticks) to motivate people and should rather favour engagement and a sense of common purpose to drive performance and innovation. In his view, organisational collaboration is created through encouragement, communication, empathy, solidarity, fairness and flexibility. The environments described above, seem to reflect the opposite of encouragement, communication, empathy, solidarity, fairness and flexibility.

2.3 CONTRIBUTION TO SPIRITUALITY VARIABLES

The qualitative data analysis therefore revealed the factors that directly contribute to or detract from the three spirituality variables IS, OS and SAW by identifying the themes that relate to these spirituality variables. In total ten themes were derived from the axial codes.

The first theme that emerges is advice to organisations on how to treat people for more effective collaboration, engagement and commitment. There are seven core ideas that encapsulate what participants' views are on how to treat people in organisations:

- 1) Demonstrate care and compassion for employees
- 2) Create a better work environment
- 3) Recognise that employees have an inner being
- 4) Provide opportunities for growth and development
- 5) Develop trust and loyalty
- 6) Treat employees fairly
- 7) Practice leadership that sets the example

Firstly, we learn from the participants to this study that in order to create an environment where effective collaboration, engagement and commitment is possible, managers need to get involved with their staff and demonstrate care and compassion for their staff. Managers need to work actively at creating comfortable working environments where people can be happy and productive. A critical ingredient to this kind of environment seems to be a flatter organisational structure and involvement of employees in decision-making.

Ashmos and Duchon's (2000) focus on recognising the inner being of employees also surfaces as a key element in how employees would like to be treated in organisations. There is cry for respect and compassion and for recognising that employees have lives outside of work. Allowing for flexibility in work and trusting that employees are competent and can do their work, without having to be micro-managed goes a long way in increasing morale and motivation. The desire for respect and care is highlighted in this theme with participants indicating that managers should think about how they communicate with employees; that they should engage and communicate in a respectful manner.

Various authors have argued that people are seeking meaningful work that allows for learning and development and that provides a sense of competence or mastery (Anderton, 2012; Cartwright & Holmes, 2006; Chalofsky, 2003; Ferreira Vasconcelos, 2013; Geldenhuys et al., 2014; Heinsohn, 2012; Kendall, 2012; Konz & Ryan, 1999; Marschke et al., 2011; Pfeffer, 2010;

Rosso, Dekas & Wrzesniewski, 2010; Saks, 2011; Seligman, 2008; Steger & Dik, 2010). This idea is confirmed by participants' views that companies and managers should provide opportunities for personal growth and learning in the organisation and that good work should be recognised and rewarded.

Lastly, fair treatment and good leadership are also highlighted as key elements for success. Leaders need to not only treat people fairly, but also pay them fairly and leaders need to not only carefully select their teams, but actively work at setting a good example to employees of the behaviour they would like their employees to display.

The second theme is the characteristics that describe spiritual work environments. High IS participants are more likely to indicate that they work in an organisation with high OS. These high OS environments are characterised by: (1) respect for the individual; (2) open, clear and transparent communication; (3) teamwork and collaboration; (4) camaraderie and a sense of friendship in the workplace; (5) an emphasis on building relationships at work; (6) a strong sense of achievement in the team; (7) tightly integrated teams that work closely together; (8) a sense of pride and trust in the team; (9) recognition for good work; (10) a sense of family in the organisation. Low IS participants are less likely to describe their work environments as having high OS.

An unexpected sub-theme that emerges from the characteristics of spiritual work environments, is that the size of the organisation actually plays a role. It seems that most of the participants are of the view that it is easier to create a spiritual work environment if you have a small team or small organisation and that large corporate environments present an obstacle to creating a spiritual work environment or experiencing spirit at work.

The third theme is the elements that characterise compassion. Both high IS and low IS participants feel that in essence compassion comes down to *understanding* and *respect*. Both high IS and low IS participants also indicate that it is important to spend time with someone and listen to them, to not judge others and to be honest with people. A sub-theme that was generated from the elements that describe compassion, was *compassion needs to be*

expressed in practical ways and describes how participants demonstrate compassion practically in their lives.

The fourth theme is the elements that lead to participants experiencing energy and vigour at work or in their work. For high IS participants, making a difference or a contribution or the desire to add value is what energises and invigorates them most in their work. For low IS participants, making a difference is also key to them feeling energised and invigorated by their work. However, for them it is more about taking on a challenges or finding solutions to problems. This theme illustrates that for some individuals (in particular high IS participants) the energy or the drive comes from within and there is a desire to spread the positive energy whilst for some of the low IS participants, they only feel energised if they are able to find solutions or when they receive positive feedback; so their energy is determined by outside forces.

The fifth theme is the elements necessary for connection to be experienced. For high IS participants, connection is about *empathy* and *understanding*. High IS participants believe that you have to be *authentic* with another person in order connect with them. High IS participants also mention that spending quality time with someone is a necessary pre-requisite for establishing a real connection with that person. For low IS participants on the other hand, authenticity and finding common ground are mentioned as the most important elements to establishing a connection with another person. Low IS participants highlight that it is easier to connect with someone who has similar values. For them, connection is more about clear communication and trust than understanding.

The sixth theme is the core values espoused by participants. Both high IS and low IS participants expressed very similar values. Many of the values mentioned by participants also reflect what could be considered universal values. The most important universal values mentioned by the participants include: honesty and integrity, respect, transparency, trust, love, compassion and kindness. The golden rule of treating others how you would like to be treated is also mentioned by both high IS and low IS participants.

The significant difference in the axial code frequency between high IS and low IS participants indicate that high IS participants are more likely to talk about their values than low IS participants. However, a clear distinction cannot be drawn between high IS and low IS participants based on their values, since the values they mention are often the same. Furthermore, these values are the values that participants espouse. Unfortunately, there is no way for the researcher to confirm whether these espoused values are enacted by participants in their daily lives. Often values espoused digress from values espoused and this could perhaps have been the distinguishing factor between high IS and low IS participants. The only conclusion that can be drawn here, is that there is a greater emphasis on values with high IS participants than with low IS participants.

The seventh theme is Corporate Social Investment (CSI) initiatives and ways in which organisations are contributing to a greater purpose. A clear distinction can be drawn between the organisations that high IS participants work in and the organisations that low IS participants work in. High IS participants experience their organisations as spiritual (with high OS) and describe 'soulful' organisations that encourage personal growth and development and that actively participates in CSI initiatives. These organisations thus embrace both the top line (higher purpose of the organisation) and the bottom line (financial performance) (Kinjerski & Skrypnek, 2004). What is striking is how these organisations actively work at getting employees involved in their CSI initiatives. On the opposite of this continuum, low IS participants experience their organisations as non-spiritual workplaces (with low OS) and describe organisations that value money more than anything. The focus is on making profit and CSI initiatives are either not supported or only supported as far as they are legally required to be supported. This is a very different work environment to those described by the high IS participants.

The eighth theme is the elements required for effective collaboration in organisations. Both high IS and low IS participants described the same elements for ensuring connection and collaboration in their organisations: (1) Ask staff for input; (2) Encourage collaborative decision-making; (3) Set clear and specific goals. Both high IS and low IS participants indicate that

collaboration is based on a shared purpose and that their staff meet regularly to ensure effective collaboration.

The ninth theme is the elements that contribute to participants' personal meaning in life. Both high IS and low IS participants highlight the same three elements that contribute to their personal meaning in life: work, family and making a difference.

The tenth theme is the characteristics that describe non-spiritual work environments. Only low IS participants described experiences that reflect that they are working in non-spiritual workplaces. The key issues mentioned by low IS participants regarding their work environments include that employees are treated as machines; that management expects too much of their staff; the organisation is not transparent and there are insufficient resources to get the work done. There is a lack of transparency in these organisations and leaders are described as having dictatorial leadership styles.

CHAPTER 6

DISCUSSION

“What lies before us and what lies behind us are small matters compared to what lies within us. And when you bring what is within out into the world, miracles happen”

– Henry David Thoreau –

In this final chapter of the thesis the research results are interpreted and each of the research questions are addressed specifically. The contributions of and limitations to the study are discussed followed by recommendations for future research.

1 RESEARCH OBJECTIVES

This study was guided by the following specific research objectives:

1. To explore the relationships between individual spirituality (IS), organisational spirituality (OS) and the experience of spirit at work (SAW).
2. To determine the nature and possible direction of the relationship between individual spirituality (IS), organisational spirituality (OS) and the experience of spirit at work (SAW).
3. To determine how individual spirituality (IS), organisational spirituality (OS) and the experience of spirit at work (SAW) contribute, either collectively or individually, to positive work outcomes such as work engagement (WE) and affective organisational commitment (OC).
4. To explore contributing variables other than individual spirituality (IS), organisational spirituality (OS) and the experience of spirit at work (SAW) that might affect the relationship between these variables.

2 CONCLUSIONS ON RESEARCH QUESTIONS

The following research questions emanated from the research objectives:

1. Is there construct redundancy between IS, OS and SAW?
2. To what extent do correlations exist between IS, OS and SAW?
3. What is the relationship between IS, OS and SAW?
4. To what extent do IS, OS and/or SAW contribute collectively or individually to WE?
5. To what extent do IS, OS and/or SAW contribute collectively or individually to affective OC?
6. What are the variables that contribute to IS, OS and/or SAW and their respective roles in WE or OC?
7. What are the individual and organisational factors that contribute to IS, OS and/or SAW?

In the next sections, the answers to each of the research questions and how these answers are linked to the overall research objectives are addressed in detail.

2.1 RESEARCH QUESTION 1: IS THERE CONSTRUCT REDUNDANCY BETWEEN INDIVIDUAL SPIRITUALITY, ORGANISATIONAL SPIRITUALITY AND SPIRIT AT WORK?

In Chapter 3 the results of an exploratory factor analysis (EFA) is discussed in detail. The EFA was run on the three measurement instruments used to measure the constructs individual spirituality, organisational spirituality and spirit at work – namely the HSS, the OSVS and the SAW – in order to ascertain whether the measurement instruments all measure distinct constructs and to ensure that there is no construct redundancy between the three constructs. The EFA revealed three independent factors. The inter-correlation of instruments through a PFA revealed relatively low correlations between the three factors (IS, OS and SAW); with two of the inter-correlations $< .32$, and only three inter-correlation loadings between the OSVS and the SAW instruments $> .32$, but still $< .6$. One can therefore argue that the HSS, OSVS and

SAW measurement instruments largely measure independent constructs and that IS, OS and SAW are three distinctly different constructs. The data does not provide support that there is construct redundancy between the three variables individual spirituality, organisational spirituality and spirit at work.

2.2 RESEARCH QUESTION 2: TO WHAT EXTENT DO CORRELATIONS EXIST BETWEEN INDIVIDUAL SPIRITUALITY, ORGANISATIONAL SPIRITUALITY AND SPIRIT AT WORK?

In Chapter 4, the quantitative research results are discussed in detail. In this study, two research models are hypothesised and tested. In order to test the fit of the two models that describe the relationship between individual spirituality, organisational spirituality and spirit at work, the researcher applied *structural equation modelling*. For both models the co-variance statistics for the three variables individual spirituality, organisational spirituality and spirit at work indicate significant relationships between all three variables. Comparing the co-variance statistics for model 1 and 2, in both models, strong positive correlations were found between IS and SAW and between IS and OS as the estimates were above .40 (at .49 and .48 respectively). The strongest correlation was between SAW and OS with the estimate at .75.

The answer to research question 2 therefore is that there are strong positive correlations between all three variables. If a respondent has a high individual spirituality score, he/she is also likely to have a high organisational spirituality score and a high spirit at work score. If a respondent has a low individual spirituality score, he/she is also likely to have a low organisational spirituality score and a low spirit at work score. As the strongest correlation is between SAW and OS, it could be argued from this data that a highly spiritual work environment (OS) and positive experiences of spirit at work (SAW) are complementary, whereas individual spirituality (IS) contributes to both and from both, but is a bit more independent.

Although spirituality has been researched since the 1980's, the idea of a workplace being spiritual was only considered in the early 2000's. It was always assumed that individual spirituality (IS) was most important and that spiritual individuals with high individual spirituality would contribute to making the work environment more spiritual. Since 2000 researchers have tried to demonstrate empirically the value of having spiritual work environments; finding correlations between workplace spirituality (OS) and various positive work outcomes. However, this study does not only re-affirm the importance of organisational spirituality and spirit at work but shows that the work environment is actually critical to spirituality, since individual spirituality is actually dependent on organisational spirituality and the experiences of spirit at work.

The correlations between individual spirituality, organisational spirituality and spirit at work in this study indicate that individuals working in highly spiritual environments (i.e. high OS) and experiencing spirit at work or in their work teams (i.e. high SAW) will also experience increased individual spirituality (i.e. high IS). The level of individual spirituality thus correlates with the nature of the work environment the person works in since those who work in organisations with high OS tend to report high IS and those who work in organisations with low OS tend to report low IS. The work environment and the culture of the organisation could thus enhance an individual's spirituality or detract from it. The extent to which an individual experiences spirit at work further enhances or detracts from their level of individual spirituality.

2.3 RESEARCH QUESTION 3: WHAT IS THE RELATIONSHIP BETWEEN INDIVIDUAL SPIRITUALITY, ORGANISATIONAL SPIRITUALITY AND SPIRIT AT WORK?

The SEM further offered some insights into the nature of the relationship between individual spirituality, organisational spirituality and spirit at work. The nature of the relationship between IS, OS and SAW seems to be that the variables are interdependent with a high organisational spirituality score correlated with a high spirit at work and a high individual spirituality score and a low organisational spirituality score correlated with a low spirit at work and a low individual spirituality score. The co-variance statistics for the three variables IS, OS and SAW indicate

significant relationships between all three variables. In both SEM models, all three variables are positively related; since all the p-values for the different co-variance statistics are $<.05$.

The findings from this study contradicts some of the paths to spirituality postulated by Kinjerski and Skrypnek (2008). Firstly, they assumed that those individuals who are already spiritual (and therefore have high individual spirituality) would automatically experience spirit at work and as a result be engaged in their work and committed to their organisations. The results from this study seems to indicate the opposite – i.e. employees working in highly spiritual environments experience more spirit at work and consequently also report higher individual spirituality. Individual spirituality is not the strongest predictor of the relationship between IS, OS and SAW.

The coming together path and the *transformative event path* of Kinjerski and Skrypnek (2008) both assume that spirit at work develops over time and is a result of abilities, experience and passion coming together or as a result of personal spiritual experiences that lead to a spiritual awakening. For individuals on these paths, spirituality happens once the individual decides to pursue their heart's calling or once they experience some form of spiritual awakening. No conclusion could be derived on this path from the quantitative results. However, in the qualitative phase of the research, it was found that nine out of the 13 interviewees are small business owners who left the corporate environments they were in to pursue their own business interests and that they were fostering organisational spirituality in their businesses as a result of their own drive to make a difference. Thus, there is some room to argue that perhaps these individuals have discovered their spirituality over time or that unhappiness and frustration in their previous jobs, pushed them to make a change that would result in a more meaningful life. Further research on these paths to spirituality is needed. Perhaps it would be useful to investigate to what extent entrepreneurs and small business owners actively try to build spiritual work environments and to what extent their employees experience spirit at work to determine if these experiences lead to higher individual spirituality.

The *contextually sensitive path* postulated by Kinjerksi and Skrypnek (2008), is distinct from the other three paths as individuals on this path experience spirit at work particularly due to the work environments they find themselves in. The results of the current study confirm that the work environment is critical for spirituality. The SEM results in this study indicate that the strongest relationship is between organisational spirituality and spirit at work. These results seem to suggest that a highly spiritual work environment predicts to what extent spirit at work would be experienced and to what extent an individual would report high individual spirituality. This last path thus assumes that the organisation has to be spiritual for individuals to experience spirit at work. This seems to be true.

During the follow-up interviews, interviewees confirmed that the work environment does make a difference to their levels of SAW and OS. An environment that allows an individual to feel “*included, challenged, supported, respected, trusted, valued and recognised*” (Kinjerski & Skrypnek, 2008, p. 325) does in fact contribute to enhanced spirituality at work where an environment that does not respect and support the individual or allow them to feel valued and recognised, does in fact detract from their ability to experience spirit at work. The answer to research question 3 therefore is that the three variables IS, OS and SAW are interdependent and that the organisation has to be spiritual for individuals to experience spirit at work and to report high individual spirituality.

According to Bullen (2011/2012) working individuals no longer want to be considered mere cogs in the machine, but want to be recognised as individuals who could and do make a significant and unique contribution to organisational success. Work is becoming a critical component of life. There is a growing need to find meaning in what we do (Geh & Tan, 2009; Deloitte, 2014, 2015). Sadly, not all organisations are succeeding in meeting the spiritual demands of the new workforce.

The results of this study demonstrate that organisations can no longer ignore spirituality and have an even greater responsibility to meet the demands of the new world of work.

Organisations have a critical role to play in whether individuals actually discover their individual spirituality and consequently find their work more meaningful and become more engaged in their work and committed to their organisations. The secular workplace has indeed become the platform for finding and expressing the sacred within us (Geldenhuys et al., 2014; Kendall, 2012; Mitroff, 2003; Saks, 2011) and those organisations who can embrace this new way of thinking and incorporate spirituality into their organisational cultures will reap the benefits of having employees who are not only talented and capable, but who also actually love what they do; find meaning in what they do and make a significant and tangible contribution to the organisation's success, because work is no longer just the place you go to in order to earn a salary, but rather a place to discover your purpose and to create and give expression to your inner being.

2.4 RESEARCH QUESTION 4: TO WHAT EXTENT DO INDIVIDUAL SPIRITUALITY, ORGANISATIONAL SPIRITUALITY AND/OR SPIRIT AT WORK CONTRIBUTE COLLECTIVELY OR INDIVIDUALLY TO WORK ENGAGEMENT?

The structural equation model (i.e. model 1) reveals that there is a strong positive correlation between spirit at work (SAW) and work engagement (WE). SAW is the strongest predictor of WE. This implies that an increase in experiences of spirituality in the workplace leads to an increase in work engagement levels. The extent to which people feel engaged and immersed in their work, is therefore somewhat dependent on the extent to which they experience spirit in their work. Those individuals who find personal meaning in their work and who feel absorbed, invigorated and energised by their work; who are able to bring their whole selves to work and are encouraged to express themselves as work and those who experience a connection with their co-workers are more likely to report being engaged at work than those who do not find their work personally meaningful and rewarding; or who are not allowed to bring their whole selves to work or give expression to their inner being; or who feel disconnected from their co-workers.

The SEM initially revealed a negative correlation between individual spirituality (IS) and work engagement (WE). This finding was confusing due to the strong positive correlations between IS, OS and SAW and the conceptual link between IS and WE. For this reason, an alternative model was analysed through SEM (see the discussion of SEM model 1A in Chapter 4) to determine the correlation between IS and WE without OS and SAW included in the model. The result is a strong positive and statistically significant relationship between IS and WE. It therefore appears as if the strong relationship between OS and SAW and the resultant impact on WE overshadows the impact of IS on WE as postulated. The standardised regression weight for this relationship is .424; confirming a strong relationship between IS and WE. Therefore, from the data it is clear that an individual who has high individual spirituality and who views their work as a means to pursue personal meaning or to make a difference, is more likely to report feeling engaged in their work.

The SEM also initially revealed a strong negative correlation between organisational spirituality (OS) and work engagement (WE). This finding was confusing due to the strong positive correlations between IS, OS and SAW. For this reason, an alternative model was analysed through SEM (see the discussion of SEM model 1B in Chapter 4) to determine the correlation between OS and WE, without IS and SAW included in the model. The result is a strong positive and statistically significant relationship between OS and WE. It therefore appears as if the strong impact of SAW overshadows the impact of OS on WE as postulated. The standardised regression weight for this relationship is .586; confirming a strong relationship between OS and WE. Therefore, an organisation that is characterised by higher organisational spirituality – or that embraces a spiritual culture – should see an increase in work engagement levels.

The answer to research question 4 therefore is that each of the variables, IS, OS and SAW individually contribute to WE. With regards to their collective contribution, IS and OS also appear to have an impact on WE through SAW as SAW is the strongest predictor of WE. This is to be expected as the experience of spirituality is where it all comes together on a practical level. However, as indicated in the discussion of research questions 2 and 3, OS and IS are

critical for SAW to be experienced as these variables are interdependent. A spiritual work environment thus clearly affects the levels of work engagement in the organisation. A spiritual organisation is more likely to create a work environment where spirit can be experienced at work. Increased experiences of spirit at work should then lead to increased work engagement. OS thus appears to have an impact on WE through SAW. It seems to be the relationship *between* SAW and OS that leads to increased work engagement. Organisations can thus obtain greater work engagement from employees by adopting a spiritual culture and increasing the levels of OS in the organisation. In organisations where employees experience spirit at work and perceive their organisations as spiritual, they are more likely to be engaged in their work. Furthermore, when employees derive direct personal meaning from their work and feel passionate about the work they do, because their work enables them to fulfil their spiritual purpose, they will be more engaged at work.

2.5 RESEARCH QUESTION 5: TO WHAT EXTENT DO INDIVIDUAL SPIRITUALITY, ORGANISATIONAL SPIRITUALITY AND/OR SPIRIT AT WORK CONTRIBUTE COLLECTIVELY OR INDIVIDUALLY TO ORGANISATIONAL COMMITMENT?

The structural equation model (i.e. model 2) reveals a strong positive correlation between spirit at work (SAW) and organisational commitment (OC) as well as between organisational spirituality (OS) and organisational commitment (OC), and a negative correlation between individual spirituality (IS) and organisational commitment (OC). It can be concluded that SAW is the strongest predictor of OC. As the experiences of spirit at work increase, the levels of affective organisational commitment in the organisation also increase. There is also a very strong positive correlation between OS and OC with the levels of organisational commitment increasing when the organisation is perceived as being more spiritual. Thus, a spiritual work environment does seem to have an influence on how attached and committed people feel to their organisations. Kinjerski and Skrypnek's (2008) contextually sensitive path seems to be the most accurate path to spirit at work as those employees who work in organisations that enact

spiritual cultures tend to be more committed to their organisations than those employees who do not work in spiritual organisations.

There is a strong negative correlation between IS and OC. This implies, an increase in individual spirituality leads to a decrease in affective organisational commitment. To a certain extent this result could be expected, since higher individual spirituality would probably result in higher commitment to one's own spiritual purpose and not necessarily to one's organisation. The meaning that spiritual individuals derive from their work, is personal and is usually directed at a personal goal to add value or make a difference and this might not be aligned with their particular work role or what the organisation is aiming to accomplish. However, from the qualitative results of this study, it seems that when employees opt to join an organisation where there is more value congruence between their personal values and that of the organisation, they also indicate feeling more committed to the organisation because the organisation's cause is also their personal cause. As it is not always possible for employees to work for organisations that strive for the same personal goals as they themselves do, it is expected that employees would express more commitment to their specific organisational roles or the work they are directly responsible for than to the larger goals of the organisation.

The answer to research question 5 therefore is that each of the variables OS and SAW individually contribute to OC. Increased individual spirituality is not reflected in higher organisational commitment levels. With regards to their collective contribution, OS appears to have an impact on OC through SAW as SAW is the strongest predictor of OC. In other words, a spiritual work environment sets the tone for experiencing more spirit at work and the likelihood that employees would feel more affectively committed to their organisations as a result. Organisations can thus obtain greater commitment from their employees by adopting a spiritual culture and creating an environment that is high in OS whilst providing opportunities for employees to experience more spirit at work. Employees that experience more spirit at work and that perceive their organisations to be highly spiritual are more likely to feel committed to their organisations.

2.6 RESEARCH QUESTION 6: WHAT ARE THE VARIABLES THAT CONTRIBUTE TO INDIVIDUAL SPIRITUALITY, ORGANISATIONAL SPIRITUALITY AND/OR SPIRIT AT WORK AND THEIR RESPECTIVE ROLES IN WORK ENGAGEMENT OR ORGANISATIONAL COMMITMENT?

The researcher also ran ANOVA procedures on the three spirituality variables IS, OS and SAW and various demographic variables to determine if specific variables contribute to IS, OS and SAW. The ANOVA procedures are discussed in detail in Chapter 4. The statistically significant variables that impact on IS, OS and SAW are highlighted again in this chapter in order to answer research question 6.

2.6.1 Variables that contribute to individual spirituality

The ANOVA revealed that the following variables have an impact on individual spirituality levels: involvement in decision-making, supervisor support, gender, ethnicity and strength of religious convictions. There are three personal demographic variables that impact on the level of individual spirituality reported by respondents – gender, ethnicity and strength of religious convictions. The findings from the ANOVA in this study revealed that females have significantly higher IS levels than males. This is congruent with what was found in other studies (Bryant, 2007; Hammermeister, Flint, El-Alayli, Ridnour, & Peterson, 2005; Simpson, Cloud, Newman & Fuqua, 2008; Van der Walt & De Klerk, 2015). Furthermore, non-white respondents (i.e. Black, Coloured and Indian) have statistically significantly higher IS scores than their Caucasian counterparts. This is also congruent with other research findings that found that Africans and other non-whites tend to be more spiritual than Caucasians (Levine, Yoo, Aviv, Ewing & Au, 2007; Taylor, Chatters & Jackson, 2007; Van der Walt & De Klerk, 2015). Lastly, the stronger respondents' religious convictions are, the higher their IS scores are. Therefore, those with stronger religious convictions, tend to have significantly higher levels of individual spirituality. These findings are congruent with Van der Walt and De Klerk's (2015) findings.

With regards to organisational factors, respondents who agree very strongly or strongly about their involvement in decision-making in the organisation, tend to have higher IS than when they either just agree, disagree or have a neutral view of their involvement in decision-making in the organisation. It seems that involving employees in decision-making could increase their expression of individual spirituality. Respondents with high IS are more likely to indicate that their supervisors support them. It seems therefore, that supervisor support is associated with an individual's level of individual spirituality.

2.6.2 Variables that contribute to organisational spirituality

The ANOVA revealed that the following variables have an impact on organisational spirituality levels: organisational support, recognition and reward, involvement in decision-making, gender and religious orientation. So again, gender is a distinguishing variable with females reporting slightly higher OS levels than males. Females thus tend to experience slightly more organisational spirituality than their male counterparts. Religious respondents also report slightly higher levels of OS than non-religious respondents. These results are consistent with Van der Walt and De Klerk's (2015) findings.

With regards to the most critical organisational variables it seems that again organisational support and involvement in decision-making impact on whether respondents experience their organisations as spiritual work environments or not. An additional variable that comes into play is recognition and reward. The more respondents feel that they are recognised and rewarded for good work by their organisations, the higher their OS score will be. Thus, it seems that organisations that recognise and reward employees for good work might see higher levels of OS.

2.6.3 Variables that contribute to spirit at work

The ANOVA revealed that the following variables have an impact on spirit at work levels: organisational support, opportunities for advancement, a substantial career change, career satisfaction, happiness at work, religious orientation and strength of religious convictions. Religion and the strength of said religious convictions affect whether respondents experience spirit at work with religious respondents reporting higher levels of SAW and those who have strong religious convictions also experiencing more SAW in their work. These findings correspond with the ANOVA conducted on IS which indicate that strong religious convictions are also linked to higher IS.

Since the experience of spirit is where it all comes together on a practical level, it makes sense that the work environment and the variables that directly affect an individual's experiences at work, would impact on their level of SAW. Organisational support is mentioned again. Thus organisational support not only leads to higher levels of OS but also higher levels of SAW. Organisations that actively support their employees will thus see an increase in both SAW and OS levels. What is interesting about the results from this ANOVA though, are the variables that are directly tied to an individual's development and personal career progression. The more respondents feel their organisations provide them with opportunities for advancement, the higher their SAW scores will be.

Both respondents who are very satisfied with their career progression and respondents who are very dissatisfied with their career progression report higher levels of SAW than those respondents who are merely satisfied, dissatisfied or neutral about their career progression. It makes sense that those individuals who are very satisfied with their career progression would experience higher levels of SAW. What is perplexing, is why respondents who are very dissatisfied with their career progression are still reporting high levels of SAW. One could postulate that perhaps the experiences of SAW are related to the organisational environment and not to the individual's feelings about their individual career tracks. This would require further

investigation for clarification as to the impact of career satisfaction on levels of SAW. Respondents who are happy and very happy at work, report higher levels of SAW. Interestingly though, those who are very unhappy at work also report higher levels of SAW than those who are unhappy or neither happy nor unhappy. It seems therefore that respondents report higher levels of SAW when they experience strong feelings of happiness or unhappiness at work. This requires further investigation for clarification on the impact of happiness at work on SAW levels.

Most striking is that those who have made a substantial career change report higher levels of SAW than respondents who have not made a substantial career change. It seems therefore that the decision to make a career change impacts on a person's experiences of spirit at work. This finding was triangulated in the qualitative follow-up interviews with nine of the 13 interviewees having made substantial career changes by leaving the corporate environment and starting their own entrepreneurial businesses. All nine these interviewees reported experiencing higher levels of SAW and OS as well as feeling more satisfied and happy with their career progression as a result.

2.7 RESEARCH QUESTION 7: WHAT ARE THE INDIVIDUAL AND ORGANISATIONAL FACTORS THAT CONTRIBUTE TO INDIVIDUAL SPIRITUALITY, ORGANISATIONAL SPIRITUALITY AND/OR SPIRIT AT WORK?

The answer to research question 7 is partly derived from the answer to research question 6 and further substantiated by the qualitative research findings. As discussed in Chapter 2, each of the variables IS, OS and SAW are made up of various factors or elements. The qualitative results of the study reveal richer detail regarding these factors or elements as well as other emerging factors that contribute to IS, OS and SAW. The detailed qualitative data analysis is discussed in Chapter 5. The findings from the qualitative data analysis are highlighted again in this chapter.

2.7.1 Contributing individual and organisational factors from ANOVA procedures

From the ANOVA results on individual spirituality, it seems that levels of IS are mostly dependent on inherent demographic factors such as gender, ethnicity and strength of religious conviction. The only organisational factors that impact on IS are involvement in decision-making and supervisor support. Both these factors lead to an increase in IS levels. Thus if an employee is allowed to participate in decision-making and is supported by his/her supervisor, he/she is more likely to experience higher levels of individual spirituality.

When it comes to levels of organisational spirituality, females and religious individuals seem to report higher levels of OS. The organisational environment affects the level of OS, with the key factors that have an impact being organisational support, recognition and reward and involvement in decision-making. The qualitative research results confirm that these factors affect whether employees perceive their organisations as spiritual or not. Furthermore, when asked what advice they have for organisations on how to treat people in organisations, these same factors are mentioned as well.

Religious individuals and those with strong religious convictions tend to report higher levels of spirit at work. Furthermore, individuals who report being either extremely satisfied or dissatisfied with their career progression or either very happy or very unhappy at work report higher levels of SAW. These results are confusing and require further investigation for clarification. The most important organisational factors that contribute to higher levels of SAW are organisational support and opportunities for advancement. An element that could be strongly linked to a lack of opportunities for advancement, would be making a career change. Individuals who report a significant career change, also report higher levels of SAW, presumably because they changed their work environments in order to experience more meaning or spirit in their work. The qualitative research results provided some confirmation of this with one of the participants reporting an increase in SAW and OS after changing jobs into a role that she finds more rewarding and fulfilling.

2.7.2 Factors revealed through qualitative data analysis

From the qualitative data analysis, ten themes emerged that provided insight to the elements that enhance or detract from individual spirituality, organisational spirituality and spirit at work:

- 1) Advice to organisations on how to treat people for more effective collaboration, engagement and commitment
- 2) Characteristics that describe spiritual work environments
- 3) The elements that characterise compassion
- 4) The elements that lead to participants experiencing energy and vigour at work or in their work
- 5) The elements necessary for connection to be experienced
- 6) Core values espoused by participants
- 7) Corporate Social Investment (CSI) initiatives and ways in which organisations are contributing to a greater purpose
- 8) The elements required for effective collaboration in organisations
- 9) The elements that contribute to participants' personal meaning in life
- 10) Characteristics that describe non-spiritual work environments

The key findings under each theme will be discussed briefly to indicate how they relate to research question 7.

2.7.2.1 *Advice to organisations on how to treat people for more effective collaboration, engagement and commitment*

Advice from interviewees to organisations on how they could improve the working environment to ensure that people experience more meaning in their work and to encourage greater connection and collaboration, can be summarised in the following key points:

- Engage with employees on a personal level. Demonstrate compassion and care for them. Support and encourage them – mentioned by eight out of 13 interviewees

- Be honest, open and transparent. Ensure open, clear and transparent communication – mentioned by eight out of 13 interviewees
- Treat and pay people fairly – mentioned by eight out of 13 interviewees
- Respect people and acknowledge that they have lives outside of work – mentioned by seven out of 13 interviewees
- Hire the right people to ensure culture-fit. Try to create value congruence between the organisation and employees – mentioned by seven out of 13 interviewees
- Provide employees with opportunities for personal growth and development – mentioned by seven out of 13 interviewees
- As far as reasonably possible, keep the organisation small and have a flat organisational structure to ensure greater connection and collaboration. In larger organisations, create the feeling of a smaller organisation by keeping departments or divisions small – mentioned by six out of 13 interviewees.
- Hold people accountable for their output and decisions and give them the freedom to work the way they want to and to take initiative – mentioned by six out of 13 interviewees
- Recognise and appreciate good work – mentioned by five out of 13 interviewees
- Management should set an example of the behaviour they expect from employees to reduce the perception of unfairness – mentioned by four out of 13 interviewees
- Involve employees in decision-making – mentioned by three out of 13 interviewees
- Trust employees and allow employees to make mistakes. Treat mistakes as part of the learning process – mentioned by three out of 13 interviewees
- Encourage teamwork and collaboration – mentioned by 3 out of 13 interviewees
- Create/inspire a shared/common purpose – mentioned by two out of 13 interviewees

The advice derived from this theme informs organisations and managers of the practical things they can do to create more spiritual work environments. Given that OS and SAW are have the greatest influence on increased work engagement and organisational commitment, this is very helpful in identifying practical ways in which organisations can obtain the benefits of incorporating a more spiritual organisational culture.

2.7.2.2 *Characteristics that describe spiritual work environments*

The second theme is the characteristics that describe spiritual work environments. High IS participants are more likely to indicate that they work in an organisation with high OS. However, we now know from this study that the levels of OS and SAW actually determine the level of IS, so it is safe to assume that the high IS participants obtain their high IS results partly because they are working in highly spiritual work environments. These high OS environments are characterised by respect for the individual; open, clear and transparent communication; teamwork and collaboration; camaraderie and a sense of friendship among employees in the organisation; a strong emphasis on building relationships at work; a strong sense of achievement in the team with tightly integrated teams that work closely together; a sense of pride and trust in the team; recognition for good work and a sense of family in the organisation.

It is easy to see how implementing the suggestions in the first theme on how to treat people in organisations can lead to environments that are characterised by the elements discussed above. These elements could also be viewed as additional advice or suggestions or measuring sticks for organisations to gauge their effectiveness at creating a spiritual work environment where it is possible to experience spirit at work.

Low IS participants are less likely to describe their work environments as having high OS. We also know from this study that low IS participants' low levels of IS is directly related to the fact that their work environments are low in OS and SAW.

An unexpected sub-theme that emerges from the characteristics of spiritual work environments, is that the size of the organisation actually plays a role. It seems that most of the participants are of the view that it is easier to create a spiritual work environment if you have a small team or small organisation and that large corporate environments present an obstacle to creating a spiritual work environment or experiencing spirit at work. Large corporates thus have to put in a much greater effort in creating spiritual work environments. Advice from the participants to

the study is to encourage line managers and department or division heads to implement these practices in their team or department and manage the team or department like a small organisation. The team and the department could thus still obtain the benefits of having a more spiritual culture and the expectation is that it would have a spill-over effect into the larger organisation. Spiritual leadership thus becomes critical to success for large corporates. Future studies might further investigate this link between spiritual leadership and the ability to implement a spiritual culture in a large corporate environment.

2.7.2.3 *The elements that characterise compassion*

The third theme is the elements that characterise compassion. Both high IS and low IS participants feel that in essence compassion comes down to *understanding* and *respect*. Both high IS and low IS participants also indicate that it is important to spend time with someone and listen to them, to not judge others and to be honest with people. A sub-theme that was generated from the elements that describe compassion, was *compassion needs to be expressed in practical ways* and describes how participants demonstrate compassion practically in their lives.

We learn from this theme that real compassion is only possible through understanding and respect. The fact that both high IS and low IS participants emphasise the same elements that constitute compassion can perhaps be taken as an indication that compassion does come naturally to humans and that most people intrinsically understand what compassion means. The descriptions of practical acts of compassion by participants, highlight how participants give freely of their time, mostly with the aim of making a difference to another person. The desire to make a difference surfaces again in the next theme.

2.7.2.4 *The elements that lead to participants experiencing energy and vigour at work or in their work*

The fourth theme is the elements that lead to participants experiencing energy and vigour at work or in their work. For high IS participants, making a difference or a contribution or the desire to add value is what energises and invigorates them most in their work. For low IS participants, making a difference is also key to them feeling energised and invigorated by their work. However, for them it is more about taking on a challenges or finding solutions to problems. This theme illustrates that for some individuals (in particular high IS participants) the energy or the drive comes from within and there is a desire to spread the positive energy whilst for some of the low IS participants, they only feel energised if they are able to find solutions or when they receive positive feedback; so their energy is determined by outside forces.

2.7.2.5 *The elements necessary for connection to be experienced*

The fifth theme is the elements necessary for connection to be experienced. For high IS participants, connection is about *empathy* and *understanding*. High IS participants believe that you have to be *authentic* with another person in order connect with them. High IS participants also mention that spending quality time with someone is a necessary pre-requisite for establishing a real connection with that person. For low IS participants on the other hand, authenticity and finding common ground are mentioned as the most important elements to establishing a connection with another person. Low IS participants highlight that it is easier to connect with someone who has similar values. For them, connection is more about clear communication and trust than understanding.

We therefore learn from this theme that similar to compassion, understanding is necessary for real connection to be experienced. However, what is perhaps most interesting about this theme, is the very different approaches followed by high IS participants versus low IS participants. High IS participants seek to understand another person in order to connect with them; so the

responsibility lies with them to establish the connection – even in the absence of some form of common ground or similar values. Low IS participants seek common ground or similar values; so the responsibility for connection is more evenly distributed. They will only connect with another person if they find something in common, which could mean that they might not try as hard to understand or connect to someone who has very different values or perspectives.

The implication of this in an organisational context is that high IS employees would probably more easily embrace diversity as they would actively try to understand those that are different from them. Low IS employees would by implication thus be less likely to embrace diversity in their organisations as they only try to understand those who have similar values to their own. This could be another area for future research. Embracing diversity in organisations is critical to solving problems and finding innovative solutions. All the more reason therefore, for organisations to adopt spiritual cultures and increase the levels of OS in the organisation as this would enable employees to experience higher IS and consequently try harder at establishing connection with their co-workers – especially those that are very different from them. It seems therefore that the organisation has to encourage diversity before employees would embrace it.

2.7.2.6 *Core values espoused by participants*

The sixth theme is the core values espoused by participants. Both high IS and low IS participants expressed very similar values. Many of the values mentioned by participants also reflect what could be considered universal values. The most important universal values mentioned by the participants include: honesty and integrity, respect, transparency, trust, love, compassion and kindness. The golden rule of treating others how you would like to be treated is also mentioned by both high IS and low IS participants.

The significant difference in the axial code frequency between high IS and low IS participants indicate that high IS participants are more likely to talk about their values than low IS

participants. However, a clear distinction cannot be drawn between high IS and low IS participants based on their values, since the values they mention are often the same. Furthermore, these values are the values that participants espouse. Unfortunately, there is no way for the researcher to confirm whether these espoused values are enacted by participants in their daily lives. Often values espoused digress from values enacted and this could perhaps have been the distinguishing factor between high IS and low IS participants. The only conclusion that can be drawn here, is that there is a greater emphasis on values with high IS participants than with low IS participants. Future studies might investigate to what extent values influence levels of IS, OS and SAW.

2.7.2.7 Corporate Social Investment (CSI) initiatives and ways in which organisations are contributing to a greater purpose

The seventh theme is Corporate Social Investment (CSI) initiatives and ways in which organisations are contributing to a greater purpose. This theme describes another factor that distinguishes spiritual organisations from non-spiritual organisations. In this study, spiritual organisations are defined as organisations that have 'soul'. Organisations that have soul embrace both the top line (higher purpose of the organisation) and the bottom line (financial performance) (Kinjerski & Skrypnek, 2004). Soulful organisations have organisational cultures that reflect caring leadership and socially responsible and value-driven business practices. These organisations recognise employees' contributions to the success of the organisation and encourage individual development and wellbeing (Ashmos & Duchon, 2000; Guillory, 2000; Kinjerski & Skrypnek, 2006a, 2008; Mitroff & Denton, 1999). These ideas are confirmed by theme 7 which draws a clear distinction between the organisations that high IS participants work in and the organisations that low IS participants work in.

The high OS environments actively embrace and practice CSI and often espouse a greater purpose than simply making money. What is also striking is how these organisations actively work at getting employees involved in their CSI initiatives. On the opposite of this continuum,

are the low OS environments that value money more than anything. The focus is on making a profit and CSI initiatives are either not supported or only supported as far as they are legally required to be supported. We know from this study that the organisational environment actually determines the level of engagement and commitment that can be obtained from staff. For this reason, organisations are encouraged to consider adopting CSI initiatives and encouraging staff to actively participate in these initiatives if they are to reap the benefits of increased engagement and commitment. It seems that CSI participation influences employees' perceptions about whether their organisations are spiritual or not. Organisations who would like to be perceived as more spiritual could thus contribute to or initiate corporate social investment projects. Having a shared purpose that goes beyond just making money also goes a long way in increasing the OS levels of the organisation as employees are allowed to feel like they are contributing to something much bigger than simply making money.

2.7.2.8 *The elements required for effective collaboration in organisations*

The eighth theme is the elements required for effective collaboration in organisations. Both high IS and low IS participants described the same elements for ensuring connection and collaboration in their organisations: (1) Ask staff for input; (2) Encourage collaborative decision-making; (3) Set clear and specific goals. Both high IS and low IS participants indicate that collaboration is based on a shared purpose and that their staff meet regularly to ensure effective collaboration. These elements were the same elements highlighted in the ANOVAS as positively affecting the levels of IS, OS and SAW.

Team work and collaboration has become an important element for businesses to remain competitive in the contemporary world of work as evidenced by articles on the topic of organisational collaboration in both the Harvard Business Review (Adler, Heckscher & Prusak, 2011; Benkler, 2011; Ibarra & Hansen, 2011; Tierney, 2011) and Forbes (Morgan, 2013). Adler et al. (2011) argue that for organisations to be innovative in the contemporary world of work, they need a lot more than mere compliance and cooperation. Rather, it is imperative that they

encourage organisational collaboration on all levels of the organisation as this is the only way to “*innovate fast enough to keep up with the competition*”; whilst trying to keep customers happy and improving cost and efficiency (Adler et al., 2011, p. 101). In their view true organisational collaboration is reflected in a culture of trust and teamwork towards a shared purpose.

An ethos of teamwork and collaboration as well as ensuring that employees have a shared purpose are practical ways in which the organisation can enhance the spiritual culture of the organisation. All the participants working in high OS environments highlighted these factors as characteristic of their work environments (see the discussion of theme 2 above).

2.7.2.9 *The elements that contribute to participants’ personal meaning in life*

The ninth theme is the elements that contribute to participants’ personal meaning in life. Both high IS and low IS participants highlight the same three elements that contribute to their personal meaning in life: work, family and making a difference.

These findings correspond with the findings from other researchers who have indicated that, in the contemporary world of work, work has become critical to people finding meaning in life and that people are seeking to find a greater sense of meaning or purpose from their work (Bullen, 2011/2012; Geh & Tan, 2009; Geldenhuys et al., 2014; Kendall, 2012; Marschke et al., 2011; May, 2014; Mitroff, 2003; Sendjaya, 2015). What is striking is the desire to make a difference or to add value. This element was also mentioned under theme 1 as directly contributing to participants’ level of energy and vigour in their work and the extent to which they feel excited about the work they do. This desire is equally important to both high IS and low IS participants as significant to their personal meaning in life as well as the level of energy and vigour they experience at work. Making a difference and finding meaning in what we do seems to be a fundamental human need (Frankl, 2004).

2.7.2.10 *Characteristics that describe non-spiritual work environments*

The last theme that emerged, is the characteristics that describe non-spiritual work environments. This theme serves as a good test for organisations to check themselves again. Only low IS participants described experiences that reflect that they are working in non-spiritual workplaces. We know from this study that the levels of OS and SAW in the organisation determine the level of IS experienced by the employee. Thus, one can assume that these participants are experiencing low IS partly because of the work environments they find themselves working in. The key elements that characterise low OS work environments, include that employees are treated as machines; that management expects too much of their staff; that the organisation is not transparent and that there are insufficient resources to get the work done. There is a lack of transparency in these organisations and leaders are described as having dictatorial leadership styles.

These elements reflect the opposite of those elements that characterise spiritual work environments. In high OS environments, employees are respected as spiritual beings who have an inner being that requires nurturing; employees are viewed holistically and receive compassion and understanding from their managers and colleagues; there are flexible work arrangements that enable employees to effectively have work-life balance and there are sufficient resources, support, encouragement and opportunities for learning and personal growth to take place. In the high OS environments there is open, honest and transparent communication and employees are allowed to participate in decision-making. Information is shared with employees and the organisations often have a flat organisational structure where employees can take initiatives and are held accountable for their output.

The shift in societal values that is spurring a shift in organisational thinking as described in Chapter 2 will continue. If organisations are to obtain the benefits of increased work engagement and organisational commitment, it is imperative that they embrace the new world of work and the changes this new world brings. The changes in the world of work is forcing

organisations to re-examine their organisational structures, policies and practices if they are to remain competitive. This has led to flatter organisational structures and a shift in responsibility away from top management and spread more evenly across the organisation. From this study, we now know that these elements are characteristic of spiritual work environments and that flatter organisational structures and shared responsibilities and purpose among all the members of the organisation directly contribute to the level of OS in the organisation.

In Chapter 2 it was mentioned that working individuals no longer want to be considered mere cogs in the machine, but want to be recognised as individuals who could and do make a significant and unique contribution to organisational success (Bullen, 2011/2012). Work is again becoming a critical component of life. With the increase in affluence in societies and industries, there is a growing need to find meaning in what we do, since life is not just about meeting our most basic survival needs (Geh & Tan, 2009; Deloitte, 2014, 2015). It seems those organisations who can embrace the demands coming from the new world of work and who can respond to these demands effectively will reap the benefits of increased work engagement and organisational commitment and ultimately better performance.

3 CONTRIBUTIONS OF THIS STUDY

3.1 SCIENTIFIC CONTRIBUTION OF THE RESEARCH

Although research interest in workplace spirituality has increased dramatically since the year 2000, most of the research thus far has been theoretical and definitional. There is a need for more empirical studies in this field (Bell-Ellis et al., 2015). The current study has made a significant contribution to the field through both quantitative and qualitative findings; thus heeding Bell-Ellis et al.'s, (2015) call for more triangulation in spirituality research. This study offers new insights into workplace spirituality through the use of a large sample size as well as investigating the relationship(s) between different spirituality constructs. The relationship between different spirituality constructs has not been investigated before. Furthermore, this

study was conducted in the South African context; adding to the diversity of research in this field, by imbedding the research in a non-American culture and within non-American businesses.

Rothman and Jordaan (2006) found a positive relationship between growth opportunities and work engagement as well as between organisational support and work engagement. The findings from the current study expanded Rothman and Jordaan's (2006) findings by indicating a positive correlation between spirit at work and work engagement, between organisational spirituality and work engagement and between individual spirituality and work engagement. This study confirms that the more an individual experiences spirit in their work (high SAW), the more they are likely to be engaged in their work (high WE). It was also found that growth opportunities and organisational support directly contribute to employees experiencing spirit at work (high SAW) and perceiving their work environments as spiritual (high OS). It therefore seems that opportunities for learning and growth and organisational support enhance employees' experiences of spirit at work and as a consequence of enhanced SAW, they tend to be more engaged in their work as well. What is still lacking in this study is an understanding of how a significant career change affects levels of spirituality (whether it be IS, OS or SAW). What was found is that respondents who have made a substantial career change report slightly higher levels of SAW than respondents who have not made a substantial career change. It seems therefore that the decision to make a career change impacts on a person's experiences of spirit at work, but it is not clear whether all career changes have that effect and/or what the impact of a change in career would be for WE levels.

The findings from this study contradicts some of the paths to spirituality postulated by Kinjerski and Skrypnek (2008). Firstly, the results from this study seem to indicate that employees working in highly spiritual environments experience more spirit at work and consequently also report higher individual spirituality. Individual spirituality was postulated by Kinjerski and Skrypnek's (2008) '*already there path*' as having a direct impact on positive work outcomes.

However, the findings from this study indicate that the environment determines the level of individual spirituality and the resultant impact on positive work outcomes.

Kinjerski and Skrypnek's (2008) '*coming together*' path and '*transformative event*' path both assume that spirit at work develops over time and is a result of abilities, experience and passion coming together or as a result of personal spiritual experiences that lead to a spiritual awakening. For individuals on these paths, spirituality happens once the individual decides to pursue their heart's calling or once they experience some form of spiritual awakening. No conclusion could be derived on this path from the quantitative results. However, in the qualitative phase of the research, it was found that nine out of the 13 interviewees are small business owners who left the corporate environments they were in to pursue their own business interests and that they were fostering organisational spirituality in their businesses as a result of their own drive to make a difference. Thus, there is some room to argue that perhaps these individuals have discovered their spirituality over time or that unhappiness and frustration in their previous jobs, pushed them to make a change that would result in a more meaningful life. Further research on this path to spirituality is needed. Perhaps it would be useful to investigate to what extent entrepreneurs and small business owners actively try to build spiritual work environments and to what extent their employees experience spirit at work to determine if these experiences lead to higher individual spirituality.

The '*contextually sensitive*' path postulated by Kinjerksi and Skrypnek (2008), is supported by this study. This path is distinct from the other three paths as individuals on this path experience spirit at work particularly due to the work environments they find themselves in. The results of the current study confirm that the work environment is critical for spirituality. The SEM results in this study indicate that the strongest relationship is between organisational spirituality and spirit at work. These results seem to suggest that a highly spiritual work environment predicts to what extent spirit at work would be experienced and to what extent an individual would report high individual spirituality. This last path thus assumes that the organisation has to be spiritual for individuals to experience spirit at work. This seems to be true.

The study by Stevison et al. (2009) found that affective organisational commitment is mediated by spirit at work. Stevison et al.'s (2009) quantitative, cross-sectional analysis of workers' SAW and the resultant impact on specific behavioural and attitudinal work outcomes provided empirical support for the conceptualisation of SAW as a higher-order latent construct that is distinct from organisational spirituality. The current study once again confirms the independence of OS and SAW as distinctly separate variables. Furthermore, the current study expands Stevison et al.'s (2009) findings by confirming a strong positive correlation between spirit at work and organisational commitment, as well as a strong positive correlation between spirit at work and organisational spirituality. OS (i.e. the work environment) is the greatest predictor of work engagement and organisational commitment levels. It can thus be assumed that when employees work in a spiritual organisation where the environment is conducive for experiencing spirit in their work, employees are more likely to feel engaged in their work and also more likely to be committed to their organisations as a result.

A holacracy describes a complete system of self-organisation and implies that the team manages itself without the need for a team leader or manager as each individual in the team takes responsibility and is held accountable for his/her output (Robertson, 2015). A core principle of the holacracy is to hold people accountable for their output and decisions and to give them the freedom to work the way they want to and to take initiative. Greater autonomy in work can lead to increased experiences of spirit at work and consequently more engagement in the work itself and also greater commitment to the organisation that provided this level of autonomy in the first place. This presents a huge gap in the current research on workplace study.

3.2 PRACTICAL IMPLICATIONS FOR PRACTITIONERS

This study reveals that the most important factors in the organisational environment that leads to higher levels of individual spirituality include involvement in decision-making and supervisor support. The most important factors in the organisational environment that lead to higher levels

of organisational spirituality include organisational support, recognition and reward and involvement in decision-making. Lastly, the organisational factors that contribute to higher levels of spirit at work include organisational support, opportunities for advancement career satisfaction and happiness at work. From a qualitative perspective, it is suggested that there are a number of things that organisations can do to create more spiritual work environments. This includes taking a personal interest in employees; providing support and encouragement; honest, open and transparent communication; fair treatment and fair payment; respect for people; flexible work arrangements; providing opportunities for personal growth and development; having small teams and encouraging team work and collaboration; holding people accountable for their output and trusting that they will make the right decisions; allowing employees to take initiative; recognising and appreciating good work; setting a good example; involvement in decision-making and creating and inspiring a shared purpose.

This study does not only re-affirm the importance of organisational spirituality and spirit at work but shows that the work environment is actually critical to spirituality, since individual spirituality is actually dependent on organisational spirituality and the experiences of spirit at work. The practical implication of this is that contrary to what was believed before about spirituality in the workplace and the importance of individual spirituality, the organisation actually has to be spiritual for individuals to experience spirit at work. This means that organisations have to actively work at creating spiritual environments and cultures if they are to reap the positive benefits of spirituality in the workplace.

The results of this study demonstrate that organisations can no longer ignore spirituality and have an even greater responsibility to meet the demands of the new world of work. Organisations have a critical role to play in whether individuals actually discover their individual spirituality and consequently find their work more meaningful and become more engaged in their work and committed to their organisations. The secular workplace has indeed become the platform for finding and expressing the sacred within us. It seems to be the relationship *between* SAW and OS that leads to increased work engagement. Organisations can thus obtain greater

work engagement from employees by adopting a spiritual culture and increasing the levels of OS in the organisation. In organisations where employees experience spirit at work and perceive their organisations as spiritual, they are more likely to be engaged in their work. A spiritual work environment also does seem to have an influence on how attached and committed people feel to their organisations.

From the qualitative data analysis, ten themes emerged that provided insight to the elements that enhance or detract from individual spirituality, organisational spirituality and spirit at work (see the discussion in Section 2.7.2 above). It seems that CSI participation influences employees' perceptions about whether their organisations are spiritual or not. Organisations who would like to be perceived as more spiritual could thus contribute to or initiate corporate social investment projects. Having a shared purpose that goes beyond just making money also goes a long way in increasing the OS levels of the organisation as employees are allowed to feel like they are contributing to something much bigger than simply making money. An ethos of teamwork and collaboration as well as ensuring that employees have a shared purpose are practical ways in which the organisation can enhance the spiritual culture of the organisation. All the participants working in high OS environments highlighted these factors as characteristic of their work environments.

4 LIMITATIONS TO THE STUDY

The fact that the researcher had to use convenience sampling and volunteer sampling to identify participants to the study present a limitation to the study. The researcher did not know the identities of the respondents beforehand and had to rely on the self-selection of recipients of the e-mails. Usually when people volunteer to participate in a study, they select to participate because they have an interest in the topic (Saunders, et al., 2009). There was no way to gauge beforehand how many participants would volunteer to complete the survey. The benefits of volunteer sampling are that it is convenient and ethically sound if proper consent is obtained.

However, the challenge is that there might be self-select bias since the researcher does not know beforehand who will be completing the survey.

Contracting iFeedback to assist with sourcing participants for the study, increased the randomness of the sample as the survey was sent to people all over South Africa and therefore also the generalizability of the results. However, at the same time, it increased the self-selection bias of volunteers in the sample, since certain individuals are more likely to complete surveys than others (McLeod, 2014).

In this study, the vast majority (i.e. 72.8%,) of respondents to the survey are at top management level. The second group that responded the most to the survey, are middle level managers (i.e. 12.6%). There are very few respondents on any of the other levels of management – a mere 14.3% in total. The uneven distribution of respondents across different hierarchical levels of the organisation thus predominantly provides the views of those that determine the policies and the culture in organisations and not those that experience or perceive the work environment created by the leaders of the organisation. Future research studies of this nature should aim to incorporate the views of individuals on lower levels of organisations as well to determine if their views on these matters are significantly different.

Two thirds of respondents to the study are male and only a third are female. Future research studies of this nature should aim to include the views of more females. Furthermore, the sample in this study is also distorted in favour of the Caucasian and Christian populations. The majority of respondents (i.e. 85%) are Caucasian (White). 5.6% of respondents are Black/African; 3% of the respondents are Coloured; 3.9% are Indian and 0.3% are Asian. This is not representative of the South African population, but it might perhaps be representative of the white collar population in South African organisations (Statistics South Africa 2005; Van der Walt & De Klerk, 2015). The majority of respondents are Christian (i.e. 71.4%). This statistic is in line with national statistics which indicate that the overwhelming majority of South Africans, or 79.8%, are Christian (SouthAfrica.info, 2015; South African Government Communication and

Information System, 2012). However, it does mean that the views reflected in these results are mostly the views of Christians. It would be interesting to determine if other religious have similar or different opinions on these matters.

One can conclude from the distribution of qualifications among respondents that the sample of respondents is a true “white-collar” sample. Care should thus be taken to not to generalise any of the results to blue-collar workers or to any other sample who significantly differs in qualifications from the current sample. Future research studies of this nature should aim to include blue-collar workers as well.

The sector classification used in the survey was too limited as evident from the fact that 292 respondents selected ‘other’ from the list of sector/industry options. Catering for a wider list of sectors/industries in the questionnaire would have been particularly useful in this study with a large sample as it would allow the researcher to compare responses from different sectors or industries.

In order to obtain an equal number of high IS and low IS participants from those who were willing to participate in follow-up interviews, it was necessary to interview three individuals who obtained moderate IS scores and not low IS scores. This means that those individuals scoring low on IS were under-represented in the qualitative phase of the research.

During the qualitative phase of the research, it was found that nine out of the 13 interviewees are small business owners who left the corporate environments they were in to pursue their own business interests and that they were fostering organisational spirituality in their businesses as a result of their own drive to make a difference. Unfortunately, the study did not allow for further exploration of the link between entrepreneurship and spirituality.

It was also discovered during the interviews that spirituality is not static, but fluctuates as individuals’ situations change with some individuals acknowledging that they felt differently

about their work environments or life situations during the interviews than they did when completing the survey. For example, during the interview, Respondent 251, indicated that at the time of completing the survey, she was working at a different organisation and she was not very happy or satisfied with her work at the time. She was feeling increasingly demotivated and despondent – hence the reason for her moderate score on the OSVS and her low score on the SAW. She had consequently made a substantial career shift and is now working in an organisation where she is very happy and very satisfied with her work. She finds her work rewarding and fulfilling on a personal level. One could assume that her OSVS and SAW scores would probably have been higher if she had completed the survey whilst at her new job. Respondent 681 also revealed that he used to be very happy at his organisation but that a hostile take-over by an international company and a resultant shift in his role and responsibilities has led to him feel increasingly despondent and demotivated.

With regards to the interpretation of survey instruments certain types of phrasing could lead to double meanings. This was discovered during the final stages of the research. During the interviews, when interviewees were asked about their religious views and the strength of their religious convictions, it was found that when some respondents indicated that they were Atheists, they would also indicate that they had strong religious convictions (meaning that they felt strongly about the fact that they are Atheists). However, some Atheists indicated that they had weak religious convictions (meaning that they did not consider themselves religious because they were Atheists). Mis-interpreting a question on a survey instrument could distort statistical results as technically Atheists who feel strongly about their Atheistic beliefs actually do have ‘strong’ religious convictions even though they might indicate that they have ‘weak’ religious convictions. There was no way for the researcher to determine after the fact how many respondents possibly mis-interpreted this question. In fact, the researcher probably would not have discovered this flaw in the questioning had it not been for the additional qualitative phase of the research where clarification could be sought in the semi-structured interviews.

Limited knowledge and experience in the application of NVivo as a CAQDAS tool limited the extent to which graphics could be generated for the qualitative research results. However, the fact that a mixed methods approach was followed in this study, increased the depth of the findings and allowed for theory triangulation. Perhaps if more time was allowed, the qualitative phase of the research could have been expanded to elaborate more on the themes generated from this phase of the research.

5 RECOMMENDATIONS FOR FUTURE RESEARCH

Further investigation of the interaction between the different spirituality variables in practice is necessary to confirm the findings of this study and to expand our understanding of spirituality in the workplace. Furthermore, linking workplace spirituality to concepts like holacracies and perhaps even how small entrepreneurial businesses differ from large corporate environments in terms of how they build and encourage workplace spirituality could greatly enhance our understanding of how spirituality practically plays out in the work environment. Future studies might also investigate this link between spiritual leadership and the ability to implement a spiritual culture in a large corporate environment. No studies have looked at these links thus far.

As mentioned already, further research is required on Kinjerski and Skrypnek's (2008) paths to spirituality as the findings from this study disconfirmed the 'always there path', confirmed the 'contextually sensitive' path but was inconclusive on the 'coming together' and 'transformative event' paths. The study by Jabeen et al. (2014) also left a number of unanswered questions. For example, by not measuring both constructs quantitatively, they were not able to provide statistical correlations between spirituality and organisational commitment. Furthermore, by not clearly distinguishing between OS and SAW, they were not able to indicate whether it is the actual work environment (OS) or the experience of spirit at work (SAW) that contributes more to organisational commitment. The current study empirically confirms Jabeen et al.'s (2014)

study and also identifies the organisational factors that directly contribute to employees' experiences of spirit at work and consequently to their level of organisational commitment.

The current study confirms Daniel and Chatelain-Jardon's (2015) findings of a positive correlation between individual spirituality and organisational commitment. Furthermore, the current study expands their study by also finding positive correlations between spirit at work and organisational commitment and between organisational spirituality and organisational commitment. What is interesting about Daniel and Chatelain-Jardon's (2015) study is that they used the same measurement instruments for IS and OC that are used in the current study. Follow-up repeat studies conducted in different contexts with different samples could provide additional confirmation of these findings.

What is perplexing about the findings of this study, is why respondents who are very dissatisfied with their career progression are still reporting high levels of spirit at work. Furthermore, respondents who are both very happy and very unhappy at work, also report higher levels of SAW. It seems therefore that respondents report higher levels of SAW when they experience strong feelings of happiness and satisfaction or unhappiness and dissatisfaction at work. Both these anomalies require further investigation for clarification on the impact of career progression/satisfaction and happiness at work on SAW levels.

The uneven distribution of respondents across different hierarchical levels of the organisation as well as the distortion in favour of the male and Caucasian and Christian populations all require that future research of this nature opt for a more diverse sample. Future research studies of this nature should also aim to include more blue-collar workers.

6 CONCLUSION

The current study has strengthened the business case for workplace spirituality. The findings in this study indicate that the organisational environment is the greatest predictor of whether employees will experience spirit at work or not and thus indirectly the greatest factor for predicting work engagement and organisational commitment levels. Comparing the correlation statistics for the two research models hypothesised in this study, strong positive correlations were found between IS and SAW, between IS and OS and between SAW and OS; with the strongest correlation between SAW and OS. All three variables are therefore positively related and OS and SAW seem to be the strongest predictors of positive work outcomes such as WE and OC. These findings substantiate the need for organisations to start playing a more active role in creating a work environment that is conducive for employees to experience spirit at work. There are a number of things that organisations can do to create more spiritual work environments and as a result reap the benefits of greater work engagement and greater organisational commitment.

Firstly, organisations and leaders should strive to engage with employees on a personal level and to take a personal interest in staff. Participants to this study mentioned consistently how important it is that leaders demonstrate compassion and care for employees and that they support and encourage employees to be the best they can be. Secondly, it is important for both leaders and organisational members to be honest, open and transparent. Managers should ensure that there is open, clear and transparent communication throughout the entire organisation. Thirdly, there is a desperate cry from employees to be recognised as holistic people and to be treated fairly as spiritual beings. Hardworking employees seek recognition and appreciation for their contributions to the organisation, not only in terms of fair pay, but also in terms of work flexibility and autonomy. Employees want to be allowed to take initiative and they are asking to be trusted. If managers could trust that employees are capable and that they can and will make the right decisions, they would likely see increased creativity, innovation and productivity from their employees.

Fourthly, it is critical that leaders and organisational members respect people and acknowledge that employees have lives outside of work. The qualitative results from this study revealed that organisations who offer flexible work arrangements for their staff and who demonstrate consideration for employees' personal lives outside of work, obtain greater loyalty, commitment and delivery output from their employees. Employees are seeking opportunities for empowerment and autonomy. Many participants to this study highlighted that they do not need to be micromanaged and that they would appreciate being trusted enough by management to do their work in their own way. Participants mentioned the importance of choosing the right people for your team and ensuring culture-fit as this could make or break the organisation. It is important that leaders ensure that the people they select are going to enhance the culture of the organisation and are going to collaborate with existing team members.

It is critical that organisations provide employees with opportunities for personal growth and development as a lack of opportunities for personal growth and development is often the main reason why employees choose to exit organisations (Deloitte, 2015). The findings from this study reveal that opportunities for growth and development are the biggest contributors to experiencing spirit at work and consequently being more engaged in work and more committed to the organisation.

As far as is reasonably possible, it is advisable to keep the organisation small and to have a flat organisational structure to ensure greater connection and collaboration. Organisational size and small teams were consistently highlighted as critical factors for success in engaging staff and establishing greater organisational collaboration. In larger corporate environments managers might try to re-create the feeling of a smaller organisation by keeping departments or divisions small and encouraging these departments or divisions to work as self-managed teams. This is the principle of holacracy. A holacracy describes a complete system of self-organisation and implies that the team manages itself without the need for a team leader or manager as each individual in the team takes responsibility and is held accountable for his/her output (Robertson, 2015). A core principle of the holacracy is to hold people accountable for

their output and decisions and to give them the freedom to work the way they want to and to take initiative. Greater autonomy in work can lead to increased experiences of spirit at work and consequently more engagement in the work itself and also greater commitment to the organisation that provided this level of autonomy in the first place.

This presents a huge gap in the current research on workplace study. Further investigation of the interaction between the different spirituality variables in practice is necessary to confirm the findings of this study and to expand our understanding of spirituality in the workplace. Furthermore, linking workplace spirituality to concepts like holacracies and perhaps even how small entrepreneurial businesses differ from large corporate environments in terms of how they build and encourage workplace spirituality could greatly enhance our understanding of how spirituality practically plays out in the work environment. No studies have looked at these links thus far.

It is important that management sets the example of the behaviour they expect from employees. This is likely to reduce the perception of unfairness and possibly also contribute to a sense of shared purpose and to employees feeling like they are part of a family. For enhanced work engagement and organisational commitment, it is critical that employees share a common purpose and are involved in decision-making as this study has demonstrated that involvement in decision-making impacts on levels of IS, OS and SAW. Involvement in decision-making leads to greater levels of spirituality on all spheres and consequently if people behave more spiritually and experience more spirit in their work, they will feel more engaged in their work and more committed to their organisations. This has a positive ripple-effect across the entire organisation. Having a shared sense of purpose increases team commitment and collaboration and not only is the work rewarding and revitalising for employees, but the organisation benefits from a more committed and engaged workforce who will be more productive. Just as important is that leaders should trust their employees and allow them to make mistakes. Organisations that are able to treat mistakes as part of the learning process will reap the benefits of a more engaged, more committed and consequently a more productive workforce.

Including these elements in the work environment not only allows for a more positive and meaningful work environment, but also encourages individuals to discover their passion and to derive meaning from the work they do. This study confirmed that organisations do in fact have a critical role to play in providing a platform for people to discover their unique spiritual purpose. A comment from one of the respondents to this study sums it up perfectly: *“I was put here for a reason. I don’t always know what that reason is, but I try and address everything in my life with some type of enthusiasm and passion, because otherwise for me, life becomes meaningless.”* (Respondent 66). Organisations have the wonderful opportunity to help people discover their purpose whilst at the same time benefitting from their passion and enthusiasm. Nothing is more rewarding than observing the contribution made by someone who is truly passionate and inspired to deliver great work.

LIST OF REFERENCES

- Abdallah, E. & Ahluwalia, A. (2013). The keys to building a high-performance culture. *Gallup Business Journal*, December. Retrieved on 24 September 2015 from:
<http://www.gallup.com/businessjournal/166208/keys-building-high-performance-culture.aspx>
- Ackers, P. & Preston, D. (1997). Born again? The ethics and efficacy of the conversion experience in contemporary management development. *Journal of Management Studies*, 5(34), 677-697.
- Adams, V. H., Snyder, C. R., Rand, K. L., King, E. A., Sigmon, D. R. & Pulvers, K. M. (2003). Hope in the workplace. In R. A. Giacalone & C. L. Jurkiewicz (Eds.), *Handbook of workplace spirituality and organizational performance* (pp. 367-377). Armonk, New York: M. E. Sharpe.
- Adler, P., Heckscher, C. & Prusak, L. (2011). Building a collaborative enterprise. *Harvard Business Review*, 89(7/8), 96-101.
- Ahmad, A. & Omar, Z. (2015). Improving organizational citizenship behavior through spirituality and work engagement. *American Journal of Applied Sciences*, 12(3), 200-207.

Albrecht, S. L. (Ed.). (2010). *Handbook of employee engagement: Perspectives, issues, research and practice*. Gloucestershire, England: Edward Elgar.

Alexander, J. (2010). Spirituality of work in nonprofit organizations. In R. A. Giacalone & C. L. Jurkiewicz (Eds), *Handbook of Workplace Spirituality and Organizational Performance* (2nd ed.). (pp. 291-305). New York: M. E. Sharpe.

Allegretti, J. G. (2000). *Loving your job, finding your passion: Work and the spiritual life*. New York: Paulist Press.

Anderson, P. (2000). This place hurts my spirit! *Journal of Quality and Participation*, 16-17.

Anderton, R. V. (2012). *The relationship between leadership styles and perceived workplace spirituality*. Unpublished doctoral thesis, School of Business and Technology, Capella University, Minneapolis, USA.

Armstrong, T. D. (1995). Exploring spirituality: The development of the Armstrong measure of spirituality. *Paper presented at the Annual Convention of the American Psychological Association*, New York.

Armstrong, T. (1996). Exploring spirituality: The development of the Armstrong Measure of Spirituality. In R. L. Jones (Ed.), *Handbook of tests and measurements for black populations* (pp. 105-115). VA: Cobb & Henry.

- Arnold, J. L. (2010). *Spirituality in the workplace and its impact on organisational performance*. Unpublished Master's dissertation, The College of St. Scholastica, Duluth, Minnesota.
- Ashar, H. & Lane-Maher, M. (2004). Success and spirituality in the new business paradigm. *Journal of Management Inquiry*, 13, 249-260.
- Ashforth, B. E. & Pratt, M. G. (2010). Institutionalised spirituality: An oxymoron? In R. A. Giacalone & C. L. Jurkiewicz (Eds), *Handbook of Workplace Spirituality and Organizational Performance* (2nd ed.). (pp. 44-58). New York: M. E. Sharpe.
- Ashmos, D.P. & Duchon, D. (2000). Spirituality at work: A conceptualization and measure. *Journal of Management Inquiry*, 9(2), 134-145.
- Atlas.ti. (2016). *What is Qualitative Data Analysis Software*. Retrieved on 1 August 2016 from: <http://atlasti.com/qualitative-data-analysis-software/>
- Attridge, M. A. (2009). Measuring and managing employee work engagement: A review of the research and business literature. *Journal of Workplace Behavioral Health*, 24(4), 383-398.
- Babbie, E. (2001). *The practice of social research*. (9th ed.). California: Thomson Learning.

- Baer, R. A., Smith, G. T., Hopkins, H., Krietemeyer, J. & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. *Assessment*, 13(1), 27-45.
- Bailey, K. D. (1994). *Methods of social research*. (4th ed.). New York: The Free Press.
- Bailin, S. (2004). Beyond the material and the mundane: Spirituality and transcending. *The Journal of Educational Thought*, 38(3), 223-236.
- Bakker, A. B. (2011). An evidence-based model of work engagement. *Current Directions in Psychological Science*, 20(4), 265-269.
- Bakker, A. B. & Bal, M. P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupation and Organizational Psychology*, 83(1), 189-206.
- Bakker, A. B. & Demerouti, E. (2008). Towards a model of work engagement. *Career Development International*, 13 (3), 209-223.
- Bakker, A. B., Leiter, M. P., Schaufeli, W. B. & Taris, T. W. (2008). Work engagement: An emerging concept in occupational health psychology. *Work & Stress*, 22(3), 187-200.

- Balducci, C., Fraccaroli, F. & Schaufeli, W. B. (2010). Psychometric properties of the Italian version of Utrecht Work Engagement Scale (UWES-9): A cross-cultural analysis. *European Journal of Psychological Assessment*, 26, 143–149.
- Barnett, C. K., Krel, T. C. & Sendry, J. (2000). Learning to learn about spirituality: A categorical approach to introducing the topic into management courses. *Journal of Management Education*, 24 (5), 562-579.
- Barney, J. (1986). Organizational culture: Can it be a source of competitive advantage? *The Academy of Management Review*, 11(3), 656-665.
- Barrett, P. (2007). Structural equation modelling: Adjudging model fit. *Personality & Individual Differences*, 42, 815-824.
- Bartlett, S. J., Piedmont, R., Bilderback, A., Matsumoto, A. K. & Bathon, J. M. (2003). Spirituality, well-being, and quality of life in people with Rheumatoid Arthritis. *Arthritis & Rheumatism*, 49(6), 778-783.
- Basselt, R., Thrower, J., Barclay, J., Powers, C., Smith, A., Tindall, M., & et al. (2005). One effort to measure implicit attitudes toward spirituality and religion. *Journal of Psychology and Christianity*, 24(3), 210-218.

- Beazley, H. (1997). *Meaning and measurement of spirituality in organizational settings: Development of a Spirituality Assessment Scale*. Unpublished doctoral thesis, The George Washington University, Washington, D.C.
- Beheshtifar, M. & Zare, E. (2013). Effect of spirituality in workplace on job performance. *Interdisciplinary Journal of Contemporary Research in Business*, 5(2), 248-254.
- Belaire, C. & Young, J. S. (2000). Influences of spirituality on counselor selection. *Counseling & Values*, 44(3), 189-197.
- Bell-Ellis, R. S., Jones, L., Longstreth, M. & Neal, J. (2015). Spirit at work in faculty and staff organizational commitment. *Journal of Management, Spirituality & Religion*, 12(2), 156-177.
- Benefiel, M. (2003). Mapping the terrain of spirituality in organizations research. *Journal of Organizational Change Management*, 16(4), 367–377.
- Benkler, Y. (2011). The unselfish gene. *Harvard Business Review*, 89(7/8), 76-86.
- Benner, D. G. (1989). Toward a psychology of spirituality: Implications for personality and psychotherapy. *Journal of Psychology and Christianity*, 5, 19–30.

- Bentein, K., Van Den Berghe, C., Van Den Berg, R. & Stinglhamber, F. (2005). The role of change in the relationship between commitment and turnover: A latent growth modeling approach. *Journal of Applied Psychology*, 90, 468-482.
- Bentler, P. M. (1990). Comparative fit indexes in structural models. *Psychological Bulletin*, 107(2), 238-46.
- Bentler, P.M. & Bonnet, D.C. (1980). Significance tests and goodness of fit in the analysis of covariance structures. *Psychological Bulletin*, 88 (3), 588-606.
- Bentler, P. M. & Chou, C. P. (1987). Practical issues in structural modeling. *Sociological Methods and Research*, 16, 87-117.
- Block, P. (1993). *Stewardship: Choosing service of self-interest*. San Francisco: Berrett-Koehler.
- Boivin, M. J. (1999). Spiritual well-being questionnaire. In P. C. Hill & R. W. Hood Jr. (Eds.), *Measures of religiosity* (pp. 375-381). Birmingham, Alabama: Religious Education Press.
- Boivin, M. J., Kirby, A. L., Underwood, L. K. & Silva, H. (1999). Spiritual Well-Being Scale. In P. C. Hill & R. W. Hood Jr. (Eds.), *Measures of religiosity* (pp. 382- 385).

- Boomsma, A. (1982). Robustness of LISREL against small sample sizes in factor analysis models. In: K. G. Joreskog & H. Wold (Eds.). *Systems under indirection observation: Causality, structure, prediction (Part I)* (pp. 149-173). Amsterdam, Netherlands: North Holland.
- Boomsma, A. (1985). Non-convergence, improper solutions, and starting values in LISREL maximum likelihood estimation. *Psychometrika*, 50, 229–242.
- Booth, L. (1984). The gauntlet of spirituality. *Alcoholism Treatment Quarterly*, 1(1), 139-141.
- Bourne, E. J. (2009). *Global shift: How a new worldview is transforming humanity*. Canada: New Harbinger/Noetic Books.
- Bradshaw, A. (1994). *Limiting the lamp: The spiritual dimension of nursing care*. (2nd ed.). London: Scutari Press.
- Bregman, L. & Thierman, S. (1995). *First person mortal: Personal narratives of illness, dying and grief*. New York: Paragon.
- Brillhart, B. (2005). A study of spirituality and life satisfaction among persons with spinal cord injuries. *Rehabilitation Nursing*, 30(1), 31-34.

- Bringer, J. D., Johnston, L. H. & Brackenridge, C. H. (2006). Using computer-assisted qualitative data analysis software to develop a grounded theory project. *Field Methods*, 18(3), 245–266.
- Brown, A. (2014). Bringing soul into the workplace. *Conscious Business Blog*. Accessed on 25 September 2015 from: <http://consciousbusinessblog.com/2014/05/28/bringing-soul-into-the-workplace/>
- Brown, R. (2003). Organizational spirituality: The sceptic's version. *Organization*, 10(2), 392-400.
- Brown, S. P. (1996). A meta-analysis and review of organizational research on job involvement. *Psychological Bulletin*, 120, 235–255.
- Brown, K. W. & Ryan, R. M. (2003). The benefits of being present: The role of mindfulness in psychological well-being. *Journal of Personality and Social Psychology*, 84, 822-848.
- Browne, M. W. & Cudeck, R. (1993). Alternative ways of assessing model fit. In K. A. Bollen & J. S. Long (Eds.). *Testing structural equation models* (pp. 136-162). Newbury Park, California: Sage.
- Bryant, A. N. (2007). Gender differences in spiritual development during the college years. *Sex Roles*, 56(11-12), 835–846.

- Buckingham, M. & Coffman, C. (1999). *First, break all the rules*. New York: Simon & Schuster.
- Bufford, R. K., Paloutzian, R. F. & Ellison, C. W. (1991). Norms for the spiritual wellbeing scale. *Journal of Psychology and Theology*, 19, 56-70.
- Bullen, S. (2011/2012). The Search for Meaning. *Top 500: South Africa's Best Managed Companies*. (5th ed.).
- Burke-Muse, J. L. (2004). Development and validation of the Inclusive Spirituality Index. *UMI Dissertation Services*. (UMI No. 3147328). Available from:
<http://www.proquest.com/en-US/products/dissertations/individuals.shtml>
- Burris, C. T. (1999). The Mysticism Scale: Research form D (M SCALE). In P. C. Hill, & R. W. Hood Jr. (Eds.), *Measures of religiosity* (pp. 363-367). Birmingham, Alabama: Religious Education Press.
- CareerBuilder. (2014). Half of US workers would keep working if they won the lottery. Retrieved on 10 October 2015 from:
http://www.careerbuilder.com/share/aboutus/pressreleasesdetail.aspx?sd=7%2f17%2f2014&siteid=cbpr&sc_cmp1=cb_pr832_&id=pr832&ed=12%2f31%2f2014

- Cartwright, S. & Holmes, N. (2006). The meaning of work: The challenge of regaining employee engagement and reducing cynicism. *Human Resource Management Review*, 16, 199–208.
- Cash, K. C. (2000). A framework for accommodating religion and spirituality in the workplace. *Academy of Management Executive*, 14(3), 124-135.
- Cash, K. C. & Gray, G. R. (2000). A framework for accommodating religion and spirituality in the workplace. *Academy of Management Executive*, 14 (3), 124-134.
- Cashman, K. (1998). *Leadership from the inside out: Becoming a leader for life*. Provo, USA: Executive Excellence.
- Cashwell, C. S., Young, J. S., Cashwell, T. H. & Belaire, C. (2001). The inclusion of spiritual process in counseling and perceived counselor effectiveness. *Counseling & Values*, 45, 145-153.
- Castells, M. (1996). *The rise of network society: The information age: Economy, Society and Culture* (Vol.1). Oxford: Blackwell.
- Cavanagh, G. F. (1999). Spirituality for managers: Context and critique. *Journal of Organizational Change Management*, 12(3), 186-199.

Chalofsky, N. (2003). An emerging construct for meaningful work. *Human Resource Development International*, 6, 69–83.

Chamiec-Case, R. R. (2006). *Developing a tool to measure social worker's perceptions regarding the extent to which they integrate their spirituality in the workplace.*

Unpublished doctoral thesis, Graduate School of Social Science, Fordham University, New York.

Chandler, C. K. & Holden, J. M. (1992). Counseling for spiritual wellness: Theory and practice. *Journal of Counseling & Development*, 71, 168-176.

Cherry, K. (2015). What is positive psychology? A brief overview of the field of positive psychology. *About Education*. Accessed on 24 September 2015 from:
<http://psychology.about.com/od/branchesofpsycholog1/a/positive-psychology.htm>

Chiu, L. (2000). Lived experience of spirituality in Taiwanese women with breast cancer. *Western Journal of Nursing Research*, 22(1), 29-53.

Claire, J. (2005). *Goodbye ego, hello life*. London: Lulu Press.

Cohen, A. (2003). *Multiple commitments in the workplace: An integrative approach*. Mahwah, New Jersey: Erlbaum.

Cole, B. S., Hopkins, C. M., Tisak, J., Steel, J. L. & Carr, B. I. (2008). Assessing spiritual growth and spiritual decline following a diagnosis of cancer: Reliability and validity of the Spiritual Transformation Scale. *Psycho-Oncology*, 17, 112–121.

Collins, J.C. (2001). *Good to great: Why some companies make the leap and others don't*. New York: HarperCollins

Collins, J. C. & Porras, J. I. (1994). *Built to Last*. New York: Harper Business.

Conger, J. A. (1994). *Spirit at work: Discovering spirituality in leadership*. San Francisco: Jossey-Bass.

Cook-Greuter, S. (2000). Mature ego development: A gateway to ego transcendence? *Journal of Adult Development*, 7(4), 227-240.

Cooper, D. (2000). *A little light on the spiritual laws*. London: Hodder & Stoughton.

Cooper-Hakim, A. & Viswesvaren, C. (2005). The construct of work commitment: Testing an integrative framework. *Psychological Bulletin*, 131 (2), 241-259.

Costello, A. B. & Osborne, J. W. (2005). Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment Research & Evaluation*, 10(7), 1-9.

Covey, S. R. (1994). *The seven habits of highly effective people*. London: Simon & Schuster.

Covey, S. R. (1995). *Principle centred leadership*. London: Simon & Schuster.

Covey, S. R. (2006). *Everyday greatness: Inspiration for a meaningful life*. Nashville, Tennessee: Rutledge Hill Press, Thomas Nelson.

Crabtree, S. (2013). Worldwide, 13% of employees are engaged at work. *Gallup Business Journal*, October. Accessed online on 16 February 2015 from:
http://www.gallup.com/poll/165269/worldwide-employees-engaged-work.aspx?utm_source=email&utm_medium=102013&utm_content=titlelink&utm_campaign=newsletter

Crabtree, S. & Robison, J. (2013). Engaged workplaces are engines of job creation. *Gallup Business Journal*, October. Accessed online on 16 February 2015 from:
http://www.gallup.com/businessjournal/165233/engaged-workplaces-engines-job-creation.aspx?utm_source=email&utm_medium=102013&utm_content=titlelink&utm_campaign=newsletter.

Craig, B. A. (n.d.). Introduction to structural equation modeling. *Study Guide*, Statistical Department, Purdue University.

Creswell, J. W. (2007). *Qualitative inquiry and research design: Choosing among five approaches*. (2nd ed.). Thousand Oaks, California: Sage.

Creswell, J. W. (2009). *Research design: Qualitative, quantitative and mixed method approaches*. (3rd ed.). Thousand Oaks, California: Sage.

Creswell, J. W., Ebersöhn, L., Eloff, I., Ferreira, R., Ivankova, N. V., Jansen, J. D., Nieuwenhuis, J., Pietersen, J., Plano Clark, V. L. & Van Der Westhuizen, C. (2007). In K. Maree (ed.). *First steps in research*. Pretoria, South Africa: Van Schaik.

Crowley, S.L. & Fan, X. (1997). Structural equation modeling: Basic concepts and applications in personality assessment research. *Journal of Personality Assessment*, 68(3), 508-31.

Crumbaugh, J. (1968). Cross-validation of purpose in life test. *Journal of Individual Psychology*, 24, 74–81.

Crumbaugh, J. C. & Maholick, L. T. (1964). An experimental study in existentialism: The psychometric approach to Frankl's concept of noogenic neurosis. *Journal of Clinical Psychology*, 20, 200–207.

Csiernik, R., & Adams, D. W. (2002). Spirituality, stress and work. *Employee Assistance Quarterly*, 18(2), 29.

- Csikszentmihalyi, M. (1988). The flow experience and its significance for human psychology. In M. Csikszentmihalyi & I. S. Csikszentmihalyi (Eds.), *Optimal experience: Psychological studies of flow in consciousness* (pp. 15-35). New York: Cambridge University Press.
- Csikszentmihalyi, M. (2008). *Flow: The psychology of optimal experience*. New York: Harper Perennial.
- Daaleman, T. P. & Frey, B. B. (2004). The spirituality index of well-being: A new instrument for health-related quality-of-life research. *Annals of Family Medicine*, 2(5), 499-503.
- Daaleman, T. P. & Van De Creek, L. (2000). Placing religion and spirituality in end-of-life care. *Journal of the American Medical Association*, 284(19), 2514-2517.
- Dale, E. S. (1991). *Bringing heaven down to earth: A practical spirituality of work*. New York: Peter Lang.
- Dancey, C. P. & Reidy, J. (2004). *Statistics without maths for psychology: Using SPSS for Windows* (3rd ed.). Harlow, England: Pearson/Prentice Hall.
- Dandona, A. (2013). Spirituality at workplace and job satisfaction. *International Journal of BioSciences, Alternative and Holistic Medicine*, 4(1), 1-9.

Daniel, J. L. (2010). The effect of workplace spirituality on team effectiveness. *Journal of Management Development*, 29(5), 442-456.

Daniel, J. L. & Chatelain-Jardon, R. C. (2015). The relationship between individual spirituality, organisational commitment and individual innovative behaviour. *Management Research & Practice*, 7(1), 5-13.

Deal, T. & Kennedy, A. (1982). *Corporate cultures*. Reading, Massachusetts: Addison-Wesley.

De Bruin, G. P., Hill, C., Henn, C. M. & Muller, K-P. (2013). Dimensionality of the UWES-17: An item response modelling analysis. *South African Journal of Industrial Psychology*, 39(2), 1-8.

Dehler, G. & Welsh, M. A. (1994). Spirituality and organizational transformation: Implications for the new management paradigm. *Journal of Managerial Psychology*, 9(6), 17-26.

Dehler, G. E. & Welsh, M. A. (2010). The experience of work: Spirituality and the new workplace. In R. A. Giacalone & C. L. Jurkiewicz (Eds), *Handbook of Workplace Spirituality and Organizational Performance* (2nd ed.). (pp. 59-72). New York: M. E. Sharpe.

De Klerk, J. J. (2005). Spirituality, meaning in life and work wellness - A research agenda.

International Journal of Organizational Analysis, 13(1), 64-88.

De Klerk, J. J., Boshoff, A. B. & Van Wyk, R. (2006). Spirituality in practice: Relationships between meaning in life, commitment and motivation. *Journal of Management, Spirituality & Religion*, 3(4), 319-347.

De Klerk, J. J., Boshoff, A. B. & Van Wyk, R. (2009). Measuring meaning in life in South Africa: Validation of an instrument developed in the USA . *South African Journal of Psychology*, 39, 314-325.

Delaney, C. (2005). The Spirituality Scale: Development and psychometric testing of a holistic instrument to assess the human spiritual dimension. *Journal of Holistic Nursing*, 23, 145-167.

De Lange, A. H., De Witte, H. & Notelaers, G. (2008). Should I stay or should I go? Examining longitudinal relations among job resources and work engagement for stayers versus movers. *Work & Stress*, 22 (3), 201-223.

Deloitte, (2014). *Global Human Capital Trends 2014: Engaging the 21st-century workforce*.

UK: Deloitte University Press. Retrieved on 11 September 2015 from:

http://dupress.com/wp-content/uploads/2014/04/GlobalHumanCapitalTrends_2014.pdf

Deloitte, (2015). *Global Human Capital Trends 2015: Leading in the new world of work*. UK:

Deloitte University Press. Retrieved on 11 September 2015 from:

<http://www2.deloitte.com/us/en/pages/human-capital/articles/introduction-human-capital-trends.html>

Demerouti, E., Bakker, A. B., De Jonge, J., Janssen, P. P. M. & Schaufeli, W. B. (2001).

Burnout and engagement at work as a function of demands and control. *Scandinavian Journal of Work, Environment & Health*, 27, 279–286.

Demerouti, E. & Cropanzano, R. (2010). From thought to action: Employee work engagement and job performance. *Engagement and Job Performance: A Handbook of Essential Theory and Research*, 147-163.

Demerouti, E., Mostert, K. & Bakker, A. B. (2010). Burnout and work engagement: A thorough investigation of the independency of both constructs. *Journal of Occupational Health Psychology*, 15, 209–222.

De Vos, A. S., Strydom, H., Fouché, C. B. & Delport, C. S. L. (2005). *Research at grass roots: For the social sciences and human services professions*. (3rd ed.). Hatfield, Pretoria, South Africa: Van Schaik.

- Dillon, W. R., Kumar, A. & Mulani, N. (1987). Offending estimates in covariance structure analysis: Comments on the causes of and solutions to Heywood cases. *Psychological Bulletin*, 101(1), 126-135.
- Doyle, D. (1992). Have we looked beyond the physical and psychosocial? *Journal of Pain and Symptom Management*, 7, 302–311.
- Duchon, D. & Plowman, D. A. (2005). Nurturing the spirit at work: Impact on work unit performance. *The Leadership Quarterly*, 16, 807-833.
- Dudeck, J. M. (2002). The influence of spirituality on the career development of college seniors: An examination of work values. *The College of Student Affairs Journal*, 23(2), 185-196.
- Dumičić, K. & Žmuk, B. (2013). Use of power analysis in choosing appropriate sample size for quality inspection. *Poslovna Izvrsnost Zagreb*, VII(1), 147-160.
- Durán, A., Extremera, N. & Rey, L. (2004). Self-reported emotional intelligence, burnout and engagement among staff in services for people with intellectual disabilities. *Psychological Reports*, 95(2), 386-390.
- Dyer, W. W. (1999). *Wisdom of the ages*. New York: Thorsons.

Dyer, W. W. (2001). *There's a spiritual solution to every problem*. London: Thorsons.

Dyer, W. W. (2004). *The power of intention: Learning to co-create your world your way*.
California: Hay House.

Dyer, W. W. (2006). *Inspiration: Your ultimate calling*. Johannesburg, South Africa: Hay
House.

Dy-Liacco, G. S., Kennedy, C., Parker, D. F. & Piedmont, R. L. (2005). Spiritual
transcendence as an unmediated causal predictor of psychological growth and world
view among Filipinos. *Research in the Social Scientific Study of Religion*, 16, 261-285.

Edwards, G. (2005). *Living magically*. London: Piatkus.

Eisner, E. W. (1998). *The enlightened eye: Qualitative enquiry and the enhancement of
educational practice*. Upper Saddle River, New Jersey: Merrill/Prentice Hall.

Elkins, D. N., Hedstrom, L. J., Hughes, L., Leaf, J. A. & Saunders, C. (1988). Toward a
humanistic phenomenological spirituality: Definition, description and measurement.
Journal of Humanistic Psychology, 28, 5-18.

Ellison, C. W. (1983). Spiritual wellbeing: Conceptualization and measurement. *Journal of
Psychology and Theology*, 11(4), 330-340.

Ellison, C. W. & Smith, J. (1991). Toward an integrative measure of health and well-being. *Journal of Psychology and Theology*, 19(1), 35-48.

Emblen, J. D. (1992). Religion and spirituality defined according to current use in nursing literature. *Journal of Professional Nursing*, 8, 41-47. DOI: 10.1016/8755-7223(92)90116-G.

Emmons, R. A. (1999a). *The psychology of ultimate concerns: Motivation and spirituality in personality*. New York: Guilford.

Emmons, R. A. (1999b). Religion in the psychology of personality: An introduction. *Journal of Personality*, 67(6), 873-888.

Emmons, R. A. (2000). Is spirituality an intelligence? Motivation, cognition and the psychology of ultimate concern. *International Journal of Psychology & Religion*, 10, 3-26.

Erickson, T. J. (2005). *Testimony submitted before the U.S. Senate Committee on Health, Education, Labor and Pensions*. May 26.

Fairholm, G. W. (1996). Spiritual leadership: Fulfilling whole-self needs at work. *Leadership & Organization Development Journal*, 17(5), 11-17.

- Fairholm, G. W. (1997). *Capturing the heart of spiritual leadership: Spirituality and community in the new American workplace*. Westport, Connecticut: Praeger.
- Fan, X., Thompson, B. & Wang, L. (1999). Effects of sample size, estimation methods, and model specification on structural equation modeling fit indexes. *Structural Equation Modeling*, 6(1), 56-83.
- Fee, J. & Ingram, J. A. (2004). Correlation of the Holy Spirit questionnaire with the spiritual well-being scale and the spiritual assessment inventory. *Journal of Psychology and Theology*, 32(2), 104-114.
- Fehring, R., Brennan, P. F. & Keller, M. L. (1987). Psychological and spiritual wellness: Theory and practice. *Research in Nursing & Health*, 10, 391-398.
- Ferguson, L. (2009). Working spiritually: Aligning gifts, purpose, and passion. In J. Marques, S. Dhiman & R. King (Eds.), *The workplace and spirituality: New perspectives on research and practice*, (pp. 23-33), Woodstock, New York: Skylight Paths Publishing.
- Ferreira Vasconcelos, A. (2013). Examining workers' perceptions of spirituality in the workplace: An exploratory study. *Management & Marketing Challenges for the Knowledge Society*, 8(2), 231-260.

Field, L. K. & Buitendach, J. H. (2011). Happiness, work engagement and organisational commitment of support staff at a tertiary education institution in South Africa. *SA Journal of Industrial Psychology*, 37(1), 1-10.

Fisher, J. (2010). Development and application of spiritual wellbeing questionnaire called SHALOM. *Religions*, 1, 105-121.

Fornaciari C. J. & Lund Dean, K. (2009). Foundations, lessons and insider tips for MSR Research. *Journal of Management, Spirituality & Religion*, 6(4), 301-321.

Fornaciari, C. J., Sherlock, J. J., Ritchie, W. J. & Dean, K. L. (2005). Scale development practices in the measurement of spirituality. *International Journal of Organizational Analysis*, 13(1), 28-49.

Fox, M. (1994). *The reinvention of work: A new vision of livelihood for our time*. San Francisco, California: Harper Collins.

Francis, L. J. & Robbins, M. (2005). *Urban hope and spiritual health: The adolescent voice*. Werrington, United Kingdom: Epworth.

Frankl, V. E. (2004). *Man's search for meaning: The classic tribute to hope from the Holocaust*. London: Rider.

- French, A. & Piedmont, R. L (2005). A psychometric evaluation of the ASPIRES short form. *Poster session presented at the annual convention of the American Psychological Association, Washington, DC.*
- Freshman, B. (1999). An exploratory analysis of definitions and applications of spirituality in the workplace. *Journal of Organizational Change Management*, 12(4), 318-27.
- Frey, B. B., Daaleman, T. P. & Peyton, V. (2005). Measuring a dimension of spirituality for health research: Validity of the Spirituality Index of Well-Being. *Research on Aging*, 27, 556-577.
- Fry, L. W. (2003). Toward a theory of spiritual leadership. *The Leadership Quarterly* 693–727.
- Fry, L. W. (2005). Introduction to the *Leadership Quarterly* special issue: Toward a paradigm of spiritual leadership. *The Leadership Quarterly*, 16(5), 619-622.
- Fry, L. W., Vitucci, S. & Cedillo, M. (2005). Spiritual leadership and army transformation: Theory, measurement and establishing a baseline. *The Leadership Quarterly*, 16, 835-862.
- Gagné, P. & Hancock, G. R. (2006). Measurement model quality, sample size, and solution propriety in confirmatory factor models. *Multivariate Behavioral Research*, 41, 65–83.

- Galanter, M., Dermatis, H., Bunt, G., Williams, C., Trujillo, M. & Steinke, P. (2007).
Assessment of spirituality and its relevance to addiction treatment. *Journal of Substance Abuse Treatment*, 33(3), 257-264.
- Garcia-Zamor, J. (2003). Workplace spirituality and organizational performance. *Public Administration Review*, 63(3), 355-363.
- Gatignon, H. (2010). *Confirmatory Factor Analysis in statistical analysis of management data*. (2nd ed.). New York: Springer.
- Geh, E. & Tan, G. (2009). Spirituality at work in a changing world: Managerial and research implications. *Journal of Management, Spirituality, & Religion*, 6(4), 287- 300.
- Geldenhuys, M., Łaba, K. & Venter, C. M. (2014). Meaningful work, work engagement and organisational commitment. *SA Journal of Industrial Psychology*, 40(1), 1-10.
- Genia, V. (1991). The spiritual experience index: A measure of spiritual maturity. *Journal of Religion & Health*, 30(4), 337-347.
- Genia, V. & Cooke, B. A. (1998). Women at midlife: Spiritual maturity and life satisfaction. *Journal of Religion and Health*, 37(2), 115-123.

Giacalone, R. A. & Jurkiewicz, C. L. (2003a). *Handbook of workplace spirituality and organizational performance*. New York: Sharpe.

Giacalone, R. A. & Jurkiewicz, C. L. (2003b). The interaction of materialist and postmaterialist values in predicting dimensions of personal and social identity. *Human Relations*, 57, 1379-1405.

Giacalone, R. A. & Jurkiewicz, C. L. (2003c). Toward a science of workplace spirituality. In R. A. Giacalone & C. L. Jurkiewicz (Eds.), *Handbook of Workplace Spirituality and Organizational Performance* (1st ed.). (pp. 3-27). New York: M. E. Sharpe.

Giacalone, R. A. & Jurkiewicz, C. L. (2010). The science of workplace spirituality. In R. A. Giacalone & C. L. Jurkiewicz (Eds.), *Handbook of Workplace Spirituality and Organizational Performance* (2nd ed.). (pp. 3-26). New York: M. E. Sharpe.

Gibson, J. W. (2009). *A re-enchanted world. The quest for a new kinship with nature*. New York: Metropolitan Books.

Gomez, R., & Fisher, J. W. (2003). Domains of spiritual well-being and development and validation of the spiritual well-being questionnaire. *Personality and Individual Differences*, 35, 1975-1991.

- Goodman, J. M., Britton, P. J., Davis-Shama, D. & Jencius, M. J. (2005). An exploration of spirituality and psychological well-being in a community of orthodox, conservative, and reform Jews. *Research in the Social Scientific Study of Religion*, 16, 63-81.
- Gorgievski, M. J., Bakker, A. B., & Schaufeli, W. B. (2010). Work engagement and workaholism: Comparing the self-employed and salaried employees. *Journal of Positive Psychology*, 5, 83–96.
- Gosling, S.D., Vazire, S., Srivastava, S. & John, O. P. (2004). Should we trust web-based studies? A comparative analysis of six preconceptions about Internet questionnaires. *American Psychologist*, 59, 93-104.
- Gotsis, G. & Kortezi, Z. (2008). Philosophical foundations of workplace spirituality: A critical approach. *Journal of Business Ethics*, 78, 575-600.
- Graci, G. M., O'Rourke, N. & Mahoney, M. J. (2003). Personal meanings of spirituality. *Constructivism in the Human Sciences*, 8, 47–56.
- Grant, D. (2005). What should a science of workplace spirituality study? The case for a relational approach. *Academy of Management Best Conference Paper, Academy of Management Annual Conference*, pp. A1-A6.
- Gratton, L. (2011). *The Shift: The future of work is already here*. London: Collins.

- Gray, M. & Coates, J. (2013). Changing values and valuing change: Toward an eco-spiritual perspective in social work. *International Social Work*, 56(3), 356-368.
- Greenberg, J. & Baron, A. B. (2003). *Behavior in organizations* (8th ed.). Upper Saddle River, New Jersey: Prentice Hall.
- Greene, J. C., Caracelli, V. J. & Graham, W. F. (1989). Toward a conceptual framework for mixed-method evaluation designs. *Educational Evaluation and Policy Analysis*, 11 (3), pp. 255-274.
- Gruman, J. A. & Saks, A. M. (2011). Performance management and employee engagement. *Human Resource Management Review*, 21, 123-136.
- Guba, E. G. & Lincoln, Y. S. (2005). Paradigmatic controversies, contradictions, and merging influences. In N. K. Denzin & Y. S. Lincoln (Eds.). *The Sage Handbook of Qualitative Research* (3rd ed.). (pp. 191-215). Thousand Oaks, California: Sage.
- Guest, G., Bunce, A. & Johnson, L. (2006). How many interviews are enough? An experiment with data saturation and validity. *Field Methods*, 18(1), 59-82.
- Guillory, W. (2000). *The living organization: Spirituality in the workplace. A guide for adapting to the chaotically changing workplace*. Salt Lake City, Utah: Innovations International.

- Hackman, J. R. & Oldham, G. R. (1976). Motivation through the design of work: Test of a theory. *Organizational Behavior and Human Performance*, 16, 250–279.
- Hair, J. F., Black, W. C., Babin, B. J. & Anderson, R. E. (2010). *Multivariate Data Analysis: A global perspective*. (7th ed.). Upper Saddle River, New Jersey: Pearson.
- Hakanen, J. (2002). Työuupumuksesta työ'n imuun*positiivisen työ'hyvinvointika'ssitteen ja-menetelma'nsuomalaisen version validointi opetusalan organisaatiossa [From burnout to job engagement: Validation of the Finnish version of an instrument for measuring job engagement (UWES) in an educational organization]. *Työ ja Ihminen*, 16, 42-58.
- Hall, T. W. & Edwards, K. J. (2002). The Spiritual Assessment Inventory: A theistic model and measure for assessing spiritual development. *Journal for the Scientific Study of Religion*, 41(2).
- Hallberg, U. E. & Schaufeli, W. B. (2006). Same same but different? Can work engagement be discriminated from job involvement and organizational commitment? *European Psychologist*, 11, 119-127.
- Halsbesleben, J. R. & Wheeler, A. R. (2008). The relative roles of engagement and embeddedness in predicting job performance and intention to leave. *Work & Stress*, 22 (3), 242-256.

Hammell, K. W. (2001). Intrinsicity: Reconsidering spirituality, meaning(s) and mandates. *Canadian Journal of Occupational Therapy*, 68(3), 186-194.

Hammermeister, J., Flint, M., El-Alayli, A., Ridnour, H. & Peterson, M. (2005). Gender differences in spiritual well-being: Are females more spiritually-well than males? *American Journal of Health Studies*, 20(2), 80-84.

Handy, C. (1998). *The hungry spirit: Beyond capitalism: A quest for purpose in the modern world*. New York: Broadway Books.

Harari, Y. N. (2014). *Sapiens: A brief history of humankind*. United Kingdom: Harvill Secker.

Harter, J. K. & Schmidt, F. L. (2008). Conceptual versus empirical distinctions among constructs: Implications for discriminant validity. *Industrial and Organizational Psychology: Perspectives on Science and Practice*, 1(1), 36–39.

Harter, J. K., Schmidt, F. L. & Hayes, T. L. (2002). Business-unit level relationship between employee satisfaction, employee engagement and business outcomes: A meta-analysis. *Journal of Applied Psychology*, 87(2), 268-279.

- Harter, J. K., Schmidt, F. L. & Keyes, C. L. M. (2003). Well-being in the workplace and its relationship to business outcomes: A review of the Gallup studies. In C. L. M. Keyes & J. Haidt (Eds.). *Flourishing: Positive psychology and the life well-lived* (pp. 205–224). Washington, DC: American Psychological Association.
- Hartsfield, M. (2003). The spirit of transformational leadership: Emotions or cognition? *Paper presented at the Christian Business Faculty Association Conference*, 1-31 October.
- Hatch, R. L., Burg, M. A., Naberhaus, D. S. & Hellmich, L. K. (1998). The Spiritual Involvement and Beliefs Scale: Development and testing of a new instrument. *The Journal of Family Practice*, 46(6), 476-486.
- Hawkins, D. R. (2002). *Power vs Force: The hidden determinants of human behaviour*. Johannesburg: Hay House.
- Hayduk, L., Cummings, G. G., Boadu, K., Pazderka-Robinson, H. & Boulianne, S. (2007). Testing! Testing! One, two three – Testing the theory in structural equation models! *Personality and Individual Differences*, 42, 841-50.
- Hedlund-de Witt, A. (2011). The rising culture and worldview of contemporary spirituality: A sociological study of potentials and pitfalls for sustainable development. *Ecological Economics*, 70, 1057-1065.

Heelas, P. & Woodhead, L. (2005). *The Spiritual Revolution. Why religion is giving way to spirituality*. Oxford: Blackwell Publishing.

Heinsohn, D. (2012). *Spirituality in the workplace: An empirical analysis of the moderator effect of demographics on the relationship among spirituality, attitude and behavior at work*. Unpublished doctoral thesis, College of Management, Lawrence Technological University, Detroit, USA.

Helminiak, D. A. (1987). *Spiritual development: An interdisciplinary study*. Chicago, Loyola University Press.

Herbert, F. (1981). *God Emperor of Dune*. New York: Putnam.

Heskett, J. I., Sasser, W. E. & Schlesinger, L. A. (1997). *The service profit chain*. New York: The Free Press.

Hesse-Biber, S. & Leavy, P. (2006). *The practice of qualitative research*. Thousand Oaks, California: Sage.

Hill, P. C. & Hood, R. W. Jr. (Eds.). (1999). *Measures of religiosity*. Birmingham, Alabama: Religious Education Press.

Hill, T. & Lewicki, P. (2007). *Statistics: Methods and applications*. Tulsa, Oklahoma: StatSoft.

- Hill, P. C., Pargament, K. I., Hood, R. W. Jr., McCullough, M. E., Swyers, J. P., Larson, D. B., et al. (2000). Conceptualizing religion and spirituality: Points of commonality, points of departure. *Journal for the Theory of Social Behaviour*, 30, 51–77.
- Hirschi, A. (2012). Callings and work engagement: Moderated mediation model of work meaningfulness, occupational identity and occupational self-efficacy. *Journal of Counseling Psychology*, 59, 479-485.
- Hitchens, C. (2000). God at work. *Free Inquiry*, 20, 5-6.
- Hodge, D. R. (2003). The Intrinsic Spirituality Scale: A new six-item instrument for assessing the salience of spirituality as a motivational construct. *Journal of Social Service Research*, 30(1).
- Hodges, S. (2002). Mental health, depression, and dimensions of spirituality and religion. *Journal of Adult Development*, 9, 109-115.
- Hoffman, A. J. (2010). Reconciling professional and personal value systems: The spiritually motivated manager and organizational entrepreneur. In R. A. Giacalone & C. L. Jurkiewicz (Eds), *Handbook of Workplace Spirituality and Organizational Performance* (2nd ed.). (pp. 3-26). New York: M. E. Sharpe.

- Hoffman, B. J., Blair, C. A., Meriac, J. P. & Woehr, D. J. (2007). Expanding the criterion domain? A quantitative review of the OCB literature. *Journal of Applied Psychology*, 92(2), 555-566.
- Holbeche, L. & Springett, N. (2003) *In search of meaning in the workplace*. Horsham, UK: Roffey Park.
- Hollins, S. (2005). Spirituality and religion: Exploring the relationship. *Nursing Management*, 12(6), 22-26.
- Hood, R. W. Jr., Ghorbani, N., Watson, P. J., Ghramaleki, A. F., Bing, M. N., Davison, H. K, et al. (2001). Dimensions of the mysticism scale: Confirming the three factor structure in the United States and Iran. *Journal for the Scientific Study of Religion*, 40(4), 691-705
- Hooper, D., Coughlan, J. & Mullen, M.R. (2008). Structural equation modelling: Guidelines for determining model fit. *Electronic Journal of Business Research Methods*, 6(1), 53–60.
- Houtman, D. & Aupers, S. (2007). The spiritual turn and the decline of tradition: The spread of post-Christian spirituality in 14 Western countries, 1981-2000. *Journal for the Scientific Study of Religion*, 46(3), 305-320.
- Howard, S. & Welbourn, D. (2004). *The spirit at work phenomenon*. London: Azure.

- Hox, J. J. & Bechger, T. M. (1998). An introduction to structural equation modeling. *Family Science Review*, 11, 354-373.
- Hoyle, R. H. (1995). The structural equation modeling approach: Basic concepts and fundamental issues. In, R. H. Hoyle (Ed.). *Structural equation modeling: Concepts, issues, and applications*. (pp. 1-15). Thousand Oaks, California: Sage Publications.
- Hu, L. T. & Bentler, P. M. (1995). Evaluating model fit. In R. H. Hoyle (Ed.). *Structural equation modeling: Concepts, issues, and applications* (pp. 76-99). Thousand Oaks, California: Sage.
- Hu, L.T. & Bentler, P.M. (1999). Cut-off criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural Equation Modeling*, 6 (1), 1-55.
- Hudson, R. (2014). The question of theoretical foundations for the spirituality at work movement. *Journal of Management, Spirituality & Religion*, 11, 27-44.
- Humphreys, T. (2000). *Work and worth: Take back your life*. Dublin: Newleaf.
- Hungelmann, J., Kenkel-Rossi, E., Klassen, L. & Stollenwerk, R. M. (1985). Spiritual well-being in older adults: Harmonious interconnectedness. *Journal of Religion and Health*, 24(2), 147-153.

Husserl, E. (1931). *Ideas: General introduction to pure phenomenology*. New York: Collier.

Iacobucci, D. (2010). Structural equations modeling: Fit Indices, sample size, and advanced topics. *Journal of Consumer Psychology*, 20, 90–98.

Iacobucci, D. & Churchill, G. A. (2009). *Marketing research: Methodological foundations (with Qualtrics Card)*. Melbourne, Australia: Cengage Learning.

Ibarra, H. & Hansen, M. T. (2011). Are you a collaborative leader? *Harvard Business Review*, 89(7/8), 68-74.

Idler, E. L., Musick, M. A., Ellison, C. G., George, L. K., Krause, N., Ory, M. G. & Williams, D. R. (2003). Measuring multiple dimensions of religion and spirituality for health research. *Research on Aging*, 25, 327– 65.

Inglehart, R. (1977). *The silent revolution: Changing values and political styles among western publics*. Princeton, New Jersey: Princeton University Press.

Inglehart, R. & Welzel, C. (2005). *Modernization, cultural change and democracy. The Human Development Sequence*. New York: Cambridge University Press.

Ingersoll, R. E. (1994). Spirituality, religion and counseling: Dimensions and relationships. *Counseling & Values*, 38, 98-112.

- Ingersoll, R. E. (1998). Refining dimensions of spiritual wellness: A cross-traditional approach. *Counseling and Values*, 42, 156-165.
- Ingersoll, R.E. (2003). Spiritual wellness in the workplace. In R. A. Giacalone & C. L. Jurkiewicz (Eds), *Handbook of Workplace Spirituality and Organizational Performance* (2nd ed.). (pp. 209-230). New York: M. E. Sharpe.
- Ingersoll, R. E. (2007). Spirituality and counseling: The dance of magic and effort. In O. J. Morgan (Ed.), *Counseling and spirituality: Views from the profession* (pp. 230-248). Boston: Houghton Mifflin.
- Ingersoll, R. E. (2010). Spiritual wellness in the workplace. In R. A. Giacalone & C. L. Jurkiewicz (Eds), *Handbook of Workplace Spirituality and Organizational Performance* (2nd ed.). (pp. 216-226). New York: M. E. Sharpe.
- Ingersoll, R. E. (2012). *Spirituality*. Accessed on 3 May 2012 from:
<http://www.elliottingersoll.com/Spirituality.html>.
- Issa, T. & Pick, D. (2011) . An interpretive mixed-methods analysis of ethics, spirituality and aesthetics in the Australian services sector. *Business Ethics: A European Review*, 20, 45-58.

- Izak, M. (2009). Spirituality in organization: A dubious idea (?): Historically oriented sensemaking in spiritually imbued organizations. *Tamara Journal for Critical Organization Inquiry*, 8(8.1), 73-88.
- Izak, M. (2012). Spiritual episteme: Sensemaking in the framework of organizational spirituality. *Journal of Organizational Change Management*, 25(1), 24-47.
- Jabeen, N., Qamar, U. & Ansari, N. (2014). Workplace spirituality and affective commitment among employees: A case study of Akhuwat. *Journal of Business Strategies*, 8(2), 39-62.
- Jaccard, J., Becker, M. A. & Wood, G. (1984). Pairwise multiple comparison procedures: A review. *Psychological Bulletin*, 96(3), 589.
- Jackson, D. L., Gillaspay, J. A. & Purc-Stephenson, R. (2009). Reporting practices in confirmatory factor analysis: An overview and some recommendations. *Psychological Methods*, 14(1), 6-23.
- Jacob, J., Jovic, E. & Brinkerhoff, M. B. (2009). Personal and planetary well-being: Mindfulness meditation, pro-environmental behavior and personal quality of life in a survey from the social justice and ecological sustainability movement. *Social Indicators Research*, 93, 275-294.

Jagers, R. J. & Smith, P. (1996). Further examination of the spirituality scale. *Journal of Black Psychology*, 22, 429–442.

Jaques, E. (1989). *Requisite Organization: A total system for effective managerial organization and managerial leadership for the 21st century*. (1st ed.). Arlington, Virginia: Cason Hall.

Jaques, E. (1996). *Requisite Organization: A total system for effective managerial organization and managerial leadership for the 21st century*. (2nd ed.). Arlington, Virginia: Cason Hall.

Jirsch, A. & Cafferky, M. (2007). *Instant intuition*. London: Piatkus.

Joon Hong, Y. (2009). *The influence of perceived workplace spirituality on job satisfaction, intention to leave and emotional exhaustion among community mental health center workers in the state of Kansas*. Unpublished PhD thesis, School of Social Welfare and Faculty of the Graduate School of the University of Kansas, USA.

Jöreskog, K. & Sörbom, D. (1993). LISREL 8: Structural equation modeling with the SIMPLIS command language. Chicago, Illinois: Scientific Software International Inc.

- Jurkiewicz, C. L. & Giacalone, R. A. (2004). A values framework for measuring the impact of workplace spirituality on organizational performance. *Journal of Business Ethics*, 49, 129–142.
- Kahn, W. A. (1990). Psychological conditions of personal engagement and disengagement at work. *Academy of Management Journal*, 33(4), 692-724.
- Kaizen Solutions. (2007). *How spirit at work develops*. Retrieved on 13 March 2012 from: <http://www.kaizensolutions.org/researchdetails.htm#develops>
- Kale, S. H. & Shrivastava, S. (2003). The enneagram system for enhancing workplace spirituality. *The Journal of Management Development*, 22(4), 308-328.
- Kammeyer-Mueller, J. D., Wanberg, C. R. Glomb, T. M. & Ahlburg, D. (2005). The role of temporal shifts in turnover processes: It's about time. *Journal of Applied Psychology*, 90, 644-658.
- Kapuscinski, A. N. & Masters, K. S. (2010). The current status of measures of spirituality: A critical review of scale development. *Psychology of Religion and Spirituality*, 2(4), 191–205.
- Karakas, F. (2010). Spirituality and performance in organizations: A literature review. *Journal of Business Ethics*, 94, 89-106.

- Kell, H. J. & Motowidlo, S. J. (2012). Deconstructing organizational commitment: Associations among its affective and cognitive components, personality antecedents, and behavioral outcomes. *Journal of Applied Social Psychology*, 42(1), 213-251.
- Kelly, E. W. (1995). *Spirituality and religion in counseling and psychotherapy*. Alexandria, USA: American Counseling Association.
- Kendall, M. H. (2012). *Workplace spirituality and the motivational power of meaningful work: An experimental study*. Unpublished PhD thesis, Capella University, Minneapolis, USA.
- Kenny, D. A. (2014). *Measuring model fit*. Accessed on 27 April 2015 from:
<http://davidakenny.net/cm/fit.htm>
- Kim, K. H. (2005). The relation among fit indexes, power and sample size in structural equation modelling. *Structural Equation Modeling: A Multidisciplinary Journal*, 12(3), 368-390.
- Kim, Y., Seidlitz, L., Ro, Y., Evinger, J. S. & Duberstain, P. R. (2004). Spirituality and affect: A function of changes in religious affiliation. *Personality and Individual Differences*, 37, 861-870.

- King, S. M. (2007). Religion, spirituality, and the workplace: Challenges for public administration essays on spirituality and public service. *Public Administration Review*, 67(1), 103-114.
- King, D. B. (2008a). *Rethinking claims of spiritual intelligence: A definition, model and measure*. Unpublished master's thesis, Trent University, Peterborough, Ontario, Canada.
- King, D. B. (2008b). Personal meaning production as a component of Spiritual Intelligence. *The 5th Biennial International Conference on Personal Meaning*, Toronto, Ontario, Canada.
- King, D. B. (2008c). Brighter paths to wellbeing: An integrative model of human intelligence and health. *Trent University Centre for Health Studies Showcase 2008*, pp. 12-13.
- King, D. B. & DeCicco, T. L. (2009). A viable model and self-report measure of Spiritual Intelligence. *International Journal of Transpersonal Studies*, 28, 68-85.
- King, D. B. (2010). *Spiritual Intelligence: A global emergence. My perspective*. Accessed on 2012-04-17 from: <http://www.dbking.net/spiritualintelligence/perspective.htm>

King, M., Jones, L., Barnes, K., Low, J., Walker, C., Wilkinson, S. & Tookman, A. (2006).

Measuring spiritual belief: Development and standardization of a Beliefs and Values Scale. *Psychological Medicine*, 36, 417– 425.

King, S. & Nicol, D. M. (1999). Organizational enhancement through recognition of individual spirituality: Reflections of Jaques and Jung. *Journal of Organizational Change Management*, 12(3), 234-242.

King, M., Speck, P. & Thomas, A. (2001). The Royal Free Interview for spiritual and religious beliefs: Development and validation of a self-report version. *Psychological Medicine*, 31, 1015-1023.

Kinjerski, V. M. (2013). The spirit at work scale: Developing and validating a measure of individual spirituality at work. In J. Neal (Ed.), *Handbook of Faith and Spirituality in the Workplace: Emerging Research and Practice*, (pp. 383-402). New York: Springer Science & Media.

Kinjerski, V. M. & Skrypnek, B. J. (2004). Defining spirit at work: Finding common ground. *Journal of Organizational Change Management*, 17(1), 26-42.

Kinjerski, V. M. & Skrypnek, B. J. (2006a). Measuring the intangible: Development of the Spirit at Work Scale. *Paper presented at the sixty-fifth Annual Meeting of the Academy of Management*, Atlanta, 16-31.

Kinjerski, V. M. & Skrypnek, B. J. (2006b). A human ecological model of spirit at work.

Journal of Management, Spirituality and Religion, 3(3), 232-239.

Kinjerski, V. M. & Skrypnek, B. J. (2008). Four paths to spirit at work: Journeys of personal meaning, fulfilment, well-being and transcendence through work. *The Career Development Quarterly*, 56, 319-329.

Kinner, R. T., Kernes, J. L. & Dautheribes, T. M. (2000). A short list of universal moral values.

Counselling & Values, 45, 4-16.

Klenke, K. (2003). The “S” factor in leadership education, practice and research. *Journal of Education and Business*, 79(1), 56.

Klenke, K. (2005). Introducing spirituality. *The International Journal of Organizational Analysis*, 13(1), 4-7.

Kline, R. B. (2005). Principles and practice of structural equation modeling (2nd ed.). New

York: Guilford.

Knestrick, J. & Lohri-Posey, B. (2005). Spirituality and health: Perceptions of older women in a rural senior high rise. *Journal of Gerontological Nursing*, 31(10), 44-50.

- Ko, J. W., Price, J. L. & Mueller, C. W. (1997). Assessment of Meyer and Allen's three-component model of organizational commitment in South Korea. *Journal of Applied Psychology*, 82, 961–973.
- Kolodinsky, R. W., Giacalone, R. A. & Jurkiewicz, C. L. (2004). Exploring personal, organizational and interactive workplace spirituality outcomes. *Paper presented at the 2004 Annual Meeting of the Academy of Management*, New Orleans.
- Kolodinsky, R. W., Giacalone, R. A. & Jurkiewicz, C. L. (2008). Workplace values and outcomes: Exploring personal, organizational and interactive workplace spirituality. *Journal of Business Ethics*, 81, 465-480.
- Konz, G. N. P. & Ryan, F. X. (1999). Maintaining an organizational spirituality: no easy task. *Journal of Organizational Change Management*, 12(3), 200-210.
- Krahnke, K., Giacalone, R., & Jurkiewicz, C. (2003). Point–counterpoint: Measuring workplace spirituality. *Journal of Organizational Change Management*, 16(4), 396–405.
- Kreitner, R. & Kinicki, A. (2001). *Organizational behaviour* (5th ed.). New York: McGraw-Hill.
- Krishnakumar, S. & Neck, C. P. (2002). The “what”, “why” and “how” of spirituality in the workplace. *Journal of Managerial Psychology*, 17, 153-164.

Kushner, H. S. (2001). *Living a life that matters*. New York: Random House.

Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks, California: Sage.

Laabs, J. J. (1995). Balancing spirituality and work. *Personnel Journal*, 74(9), 60-76.

Landrum, C. J. & Underwood, J. R. (2000, March). Spirituality of older adults: Expanding the norms of an existing instrument. *Paper presented at the Annual Conference of the American Counseling Association, Washington, DC.*

Laurie, S. G. & Tucker, M. J. (1982). *Centering: A guide to inner growth*. United Kingdom: Excalibur Books.

Lawler, E. & Worley, C.G. (2006). Winning support for organizational change: Designing employee reward systems that keep on working. *Ivey Business Journal*, March/April, 34.

Ledger, S. D. (2005). The duty of nurses to meet patients' spiritual and/or religious needs. *British Journal of Nursing*, 14(4), 220-225.

Leedy, P. D. & Ormrod, J. E. (2010). *Practical Research: Planning and design*. (9th ed.). Upper Saddle River, New Jersey: Merrill.

- Legere, T. E. (1984). A spirituality for today. *Studies in Formative Spirituality*, 5(3), 375-383.
- Lenth, R. V. (2001). Some practical guidelines for effective sample size determination. *The American Statistician*, 55(3), 187-193.
- Levine, T. R. (2005). Confirmatory factor analysis and scale validation in communication research. *Communication Research Reports*, 22(4), 335-338.
- Levine, E. G., Yoo, G., Aviv, C., Ewing, C. & Au, A. (2007). Ethnicity and spirituality in breast cancer survivors. *Journal of Cancer Survivors*, 1, 212-225.
- Lewins, A. & Silver, C. (2007). *Using software in qualitative research: A step by step guide*. London: Sage.
- Lieberman, M. (2013). *Social: Why our brains are wired to connect*. New York: Crown.
- Lips-Wiersma, M. (2002a). Making conscious choices in doing research on workplace spirituality: Utilizing the “holistic development model” to articulate values, assumptions and dogmas of the knower. *Journal of Organizational Change Management*, 16 (4), 406-425.

- Lips-Wiersma, M. (2002b). The influence of spiritual “meaning-making” on career behaviour. *Journal of Management Development*, 21(7), 497–520.
- Lips-Wiersma, M. & Morris, L. (2009). Discriminating between ‘meaningful work’ and the ‘management of meaning’. *Journal of Business Ethics*, 88(3), 491–511.
- Lloyd, T. (1990). *The ‘Nice’ Company*. London: Bloomsbury.
- Lockwood, N. R. (2007). *Leveraging employee engagement for competitive advantage*. Alexandria, Virginia: Society for Human Resource Management.
- Long, B. S. & Mills, J. H. (2010). Workplace spirituality, contested meaning and the culture of organization: A critical sensemaking account. *Journal of Organizational Change Management*, 23(3), 325-341.
- Lowe, G. (2000). *The quality of work: A people centered agenda*. Don Mills, Ontario: Oxford University Press.
- Ludwig, T. D. & Frazier, C. B. (2012). Employee engagement and organizational behavior management. *Journal of Organizational Behavior Management*, 32, 75-82.

- Lund Dean, K. (2004). Systems thinking's challenge to research in spirituality and religion at work: An interview with Ian Mitroff. *Journal of Organizational Change Management*, 17(1), 11-25.
- Lund Dean, K., Fornaciari, C. J. & McGee, J.J. (2003). Research in spirituality, religion, and work: Walking the line between relevance and legitimacy. *Journal of Organizational Change Management*, 16(4), 378-395.
- MacCallum, R.C., Browne, M.W. & Sugawara, H., M. (1996). Power analysis and determination of sample size for covariance structure modeling. *Psychological Methods*, 1 (2), 130-149.
- MacCallum, R. C. & Hong, S. (1997). Power analysis in covariance structure modeling using GFI and AGFI. *Multivariate Behavioral Research*, 32, 193-210.
- MacDonald, D. A. (2000a). *The Expressions of Spirituality Inventory: Test development, validation and scoring information*. Unpublished manuscript, University of Detroit Mercy.
- MacDonald, D.A. (2000b). Spirituality: Description, measurement, and relation to the five factor model of personality. *Journal of Psychology*, 68(1), 154-197.

- MacDonald, D.A. & Holland, D. (2003). Spirituality and the MMPI-2. *Journal of Clinical Psychology*, 59(4), 399-410.
- Macey, W. H. & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1(1), 3-30.
- Macey, W. H., Schneider, B., Barbera, K. M. & Young, S. A. (2009). *Employee engagement: Tools for analysis, practice and competitive advantage*. Malden, Washington: Wiley-Blackwell.
- Maddox, M. (2000). Spiritual wellness in older women. *Journal of Christian Nursing*, 17(1), 27-29.
- Maher, M. F. & Hunt, T. K. (1993). Spirituality reconsidered. *Counseling and Values*, 38, 21-28.
- Marcic, D. (1997). *Managing with the wisdom of love: Uncovering virtue in people and organizations*. San Francisco: Jossey-Bass.
- Manz, C. C. (1998). *The leadership wisdom of Jesus*. San Francisco: Berrett-Koehler.

Marques, J. (2005). Socializing a capitalistic world: Redefining the bottom line. *Journal of American Academy of Business*, 7(1), 283-287.

Marques, J., Dhiman, S. & King, R. (2005). Spirituality in the workplace: Developing an integral model and a comprehensive definition. *Journal of American Academy of Business, Cambridge*, 7(1), 81-91.

Marschke, E., Preziosi, R. & Harrington, W. J. (2011). How sales personnel view the relationship between job satisfaction and spirituality in the workplace. *Journal of Organizational Culture, Communications and Conflict*, 15(2), 71-110.

Marsh, H. W., Hau, K. T., Balla, J. R. & Grayson, D. (1998). Is more ever too much? The number of indicators per factor in confirmatory factor analysis. *Multivariate Behavioral Research*, 33, 181–220.

Marsh, H. W. & Hocevar, D. (1985). Application of confirmatory factor analysis to the study of self-concept: First- and higher order factor models and their invariance across groups. *Psychological Bulletin*, 97(3), 562-582.

Marshall, C. & Rossman, G. B. (2006). *Designing qualitative research*. (4th ed.). Thousand Oaks, California: Sage.

- Mascaro, N., Rosen, D. H. & Morey, L. C. (2003). The development, construct validity and clinical utility of the Spiritual Meaning Scale. *Personality and Individual Differences*, 37, 845– 860.
- Maslach, C. & Leiter, M. P. (1997). *The truth about burnout: How organizations cause personal stress and what to do about it*. San Francisco: Jossey-Bass.
- Maslach, C., Schaufeli, W. B. & Leiter, M. P. (2001). Job burnout. *Annual Review of Psychology*, 52, 397–422.
- Maslow, A. H. (1954). *Motivation and personality*. New York: Harper & Row.
- Maslow, A. H. (2011). *Toward a psychology of being* (reprint of 1st ed.). Blacksburg, USA: Wilder Publications.
- Masters, K. S. (2007). Religiosity/Spirituality and behavioral medicine: Investigations concerning the integration of spirit with body. *Journal of Behavioral Medicine*, 30, 287–289. doi:10.1007/s10865-007–9116-5.
- Mathieu, J. E. & Zajac, D. M. (1990). A review and meta-analysis of the antecedents, correlates and consequences of organizational commitment. *Psychological Bulletin*, 108(2), 171–194.

- Mauno, S., Kinnunen, U. & Ruokolainen, M. (2007). Job demands and resources as antecedents of work engagement: A longitudinal study. *Journal of Vocational Behavior*, 70(1), 149-171.
- Mauritzen, J. (1988). Pastoral care for the dying and bereaved. *Death Studies*, 12, 111-122.
- May, A. (2014). Why work-life balance is an outdated myth. *Executive Style*, August. Retrieved on 24 September 2015 from: <http://www.executivestyle.com.au/why-worklife-balance-is-an-outdated-myth-103uyx>
- May, D. R., Gilson, R. L. & Harter, L. M. (2004). The psychological conditions of meaningfulness, safety and availability of the human spirit at work. *Journal of Occupational and Organizational Psychology*, 77 (1), 11-37.
- McClain, C. S., Rosenfeld, B. B. & Breitbart, W. (2003). Effect of spiritual well-being on end-of-life despair in terminally- ill cancer patients. *The Lancet*, May, 361(9369), 1575-1664.
- McCormick, D. W. (1994). Spirituality and management. *Journal of Managerial Psychology*, 9(6), 5-8.

McDonald, R. P. & Ho, M. H. R. (2002). Principles and practice in reporting statistical equation analyses. *Psychological Methods*, 7(1), 64-82.

McKnight, R. (1984). Spirituality in the workplace. In J. D. Adams (Ed.), *Transforming work: A collection of organizational transformation readings* (pp. 138-153). Alexandria, Virginia: Miles River Press.

McLeod, S. A. (2014). Sampling Methods. Accessed on 18 February 2015 from:
<http://www.simplypsychology.org/sampling.html>

McMullen, B. (2003). Spiritual intelligence. *Student BMJ*, 11(March).

Meglino, B., Ravlin, E. & Adkins, D. (1989). A work values approach to corporate culture: A field test of the value congruence process and its relationship to individual outcomes. *Journal of Applied Psychology*, 74(3), 424–432.

Merriam, S. B. (1998). *Qualitative Research and Case Study applications in Education*. San Francisco, California: Jossey-Bass.

Meyer, J. P. & Allen, N. J. (1984). Testing the side-bet theory of organizational commitment: Some methodological considerations. *Journal of Applied Psychology*, 69, 372-378.

Meyer, J. P. & Allen, N. J. (1986). Development and consequences of three components of commitment. *Paper presented at the Annual Meeting of the Administrative Sciences Association of Canada*, Whistler, British Columbia.

Meyer, J. P. & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human Resource Management Review*, 1(1), 61-89.

Meyer, J. P. & Allen, N. J. (1997). *Commitment in the workplace: Theory, research and application*. Thousand Oaks, California: Sage.

Meyer, J. P., Becker, T. E. & Van Den Berghe, C. (2004). Employee commitment and motivation: A conceptual analysis and integrative model. *Journal of Applied Psychology*, 89, 991–1007.

Meyer, J. P. & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human Resource Management Review*, 11, 299–326.

Meyer, J. P., Stanley, D. J., Herscovitch, L. & Topolnytsky, L. (2002). Affective, continuance, and normative commitment to the organization: A meta-analysis of antecedents, correlates, and consequences. *Journal of Vocational Behavior*, 61, 20–52.

Meyers, C. (2007). *Industrial psychology*. New York: Garnsey Press.

- Miles, J. & Shevlin, M. (2007). A time and a place for incremental fit indices. *Personality & Individual Differences*, 42 (5), 869-74.
- Miller, L. (1998). After their checkup for the body, some get one for the soul. *The Wall Street Journal*, 20 July, A1-A6.
- Miller, E. D. (2004). The development and validation of a new measure of spirituality. *North American Journal of Psychology*, 6(3), 423-430.
- Miller, D. W. & Ewest. T. (2015). A new framework for analyzing organizational workplace religion and spirituality. *Journal of Management, Spirituality & Religion*, 12(4), 305-328.
- Miller, W. R. & Martin, H. E. (1988). Spirituality and behavioural psychology: Toward integration. In W. R. Miller & J. E. Martin (Eds.), *Behaviour therapy and religion*. Newbury Park, California: Sage.
- Milliman, J., Czaplewski, A. J., & Ferguson, J. (2003). Workplace spirituality and employee work attitudes: An exploratory empirical assessment. *Journal of Organizational Change Management*, 16, 426-447.
- Milliman, J., Ferguson, J., Trickett, D. & Condemi, B. (1999). Spirit and community at Southwest Airlines: An investigation of a spiritual values-based model. *Journal of Organizational Change Management*, 12, 221-233.

- Mills, M. J., Culbertson, S. S. & Fullager, C. J. (2012). Conceptualizing and measuring engagement: An analysis of the Utrecht Work Engagement Scale. *Journal of Happiness Studies*, 13 (3), 519–545.
- Mirvis, P. H. (1997). “Soul work” in organizations. *Organization Science*, 8(2), 193-206.
- Mitroff, I. I. (2003). Do not promote religion under the guise of spirituality. *Organization*, 10(2), 375-382.
- Mitroff, I. I. & Denton, E. A. (1999a). *A spiritual audit of corporate America: A hard look at spirituality, religion and values in the workplace*. San Francisco: Jossey-Bass.
- Mitroff, I. I. & Denton, E. A. (1999b). A study of spirituality in the workplace. *Sloan Management Review*, 40(4), 83-92.
- Moberg, D. O. (1984). Subjective measures of spiritual wellbeing. *Review of Religious Research*, 25(4), 357-365.
- Moberg, D. O. (2002). Assessing and measuring spirituality: Confronting dilemmas of universal and particular evaluative criteria. *Journal of Adult Development*, 9, 47–60.
doi:10.1023/A:1013877201375.

- Mohammed, A. A., Wisnieski, J., Askar, M. & Syed, I. (2004). Toward a theory of spirituality in the workplace. *Competitiveness Review*, 14(1&2), 102-108.
- Montgomery, A. J., Peeters, M. C. W., Schaufeli, W. B. & Den Ouden, M. D. (2003). Work-home interference among newspaper managers: Its relationship with burnout and engagement. *Anxiety, Stress & Coping*, 16(2), 195-211.
- Morgan, J. (2013). The 12 habits of highly collaborative organizations. *Forbes*, 191(10),
- Morgan, J. D. (1993). The existential quest for meaning. In K. J. Doka & J. D. Morgan (Eds.), *Death and Spirituality* (pp. 3-9). Amityville, New York: Baywood.
- Moore, T. W. & Casper, W. J. (2006). An examination of proxy measures of workplace spirituality: A profile models of multidimensional constructs. *Journal of Leadership and Organizational Studies*, 12(4), 109-118.
- Morse, J. M. (1991). *Qualitative nursing research: A contemporary dialogue*. Newbury Park: Sage.
- Morse, J. M., Barrett, M., Mayan, M., Olson, K. & Spiers, J. (2002). Verification strategies for establishing reliability and validity in qualitative research. *International Journal of Qualitative Methods*, 1(2), 13-22.

- Moss, S. (2008). Confirmatory Factor Analysis. *Psychlopedia*. Accessed on 5 April 2015 from: <http://www.psych-it.com.au/Psychlopedia/article.asp?id=163>
- Moss, S. (2009). Fit indices for structural equation modelling. *Psychlopedia*. Accessed on 26 April 2015 from: <http://www.psych-it.com.au/Psychlopedia/article.asp?id=277>
- Mouton, J. (2001). *How to succeed in your master's and doctoral studies: A South African guide and resource book*. Hatfield, Pretoria, South Africa: Van Schaik.
- Mowday, R. T., Porter, L. W. & Steers, R. M. (1982). *Employee-organization linkages: The psychology of commitment, absenteeism, and turnover*. New York: Academic Press.
- Moxley, R. S. (2000). *Leadership and spirit: Breathing new vitality and energy into individuals and organizations*. San-Francisco: Jossey-Bass.
- Mulaik, S.A., James, L.R., Van Alstine, J., Bennet, N., Lind, S. & Stilwell, C.D. (1989). Evaluation of goodness-of-fit indices for structural equation models. *Psychological Bulletin*, 105(3), 430-45.
- Muldoon, M. & King, N. (1995). Spirituality, healthcare and bioethics. *Journal of Religion and Health*, 34(4), 329-349.

- Murray, R. & Zentner, J. (2001). *Health promotion strategies through the life span*. (7th ed.). Stanford: Prentice Hall.
- Muthén, L. K. & Muthén, B. O. (2002). How to use a Monte Carlo study to decide on sample size and determine power. *Structural Equation Modeling*, 4, 599–620.
- Myers, J. E. (1990). Wellness throughout the lifespan. *Guidepost*, May.
- Nair, K. (1997). *A higher standard of leadership: Lessons from the life of Gandhi*. San Francisco: Berrett-Koehler.
- Nasel, D. D. & Haynes, D. G. (2005). Spiritual and Religious Dimensions Scale: Development and psychometric analysis. *Australian Journal of Psychology*, 57, 61–71.
- Neal, J. (2000). Work as service to the divine: Giving our gifts selflessly and with joy. *The American Behavioral Scientist*, 43(8), 1316-1333.
- Neck, C. P. & Milliman, J. F. (1994). Thought self-leadership: Finding spiritual fulfilment in organizational life. *Journal of Managerial Psychology*, 9(6), 9-16.
- Newman, D. A. & Harrison, D. A. (2008). Been there, bottled that: Are state and behavioural work engagement new and useful construct 'wines'? *Industrial and Organizational Psychology*, 1, 31–35.

Newport, F. (2013). In US most would still work, even if they won millions. *Gallup*, August.

Retrieved on 10 October 2015 from: <http://www.gallup.com/poll/163973/work-even-won-millions.aspx>

Ng, T. W. H., Feldman, D. C. & Lam, S. S. K. (2010). Psychological contract breaches, organisational commitment and innovation-related behaviors: A latent growth modeling approach. *Journal of Applied Psychology*, 95, 744-751.

Nooralizad, R., Ghorchian, N. & Jaafari, P. (2011). A casual model depicting the influence of spiritual leadership and some organizational and individual variables on workplace spirituality. *Advances in Management*, 4, 14-20.

Nunnally, J. C. (1967). *Psychometric theory*. New York: McGraw-Hill.

O'Conner, T. (2009). Spiritual Self. *In The Black*, 79(8), 65-66.

Oppenheim, A. N. (2000). *Questionnaire design, interviewing and attitude measurement*. (new ed.). London: Continuum International.

O'Reilly, C. A. & Chatman, J. A. (1986). Organizational commitment and psychological attachment: The effects of compliance, identification, and internalization of prosocial behavior. *Journal of Applied Psychology*, 71, 492–499.

Pagnini, F., Lunetta, C., Rossi, G., Banfi, P., Gorni, K., Cellotto, N., ... Corbo, M. (2011).

Existential well-being and spirituality of individuals with amyotrophic lateral sclerosis is related to psychological well-being of their caregivers. *Amyotrophic Lateral Sclerosis*, 12, 105-108.

Paloutzian, R. F. & Ellison, C. W. (1982). Loneliness, spiritual wellbeing and the quality of life. In L. A. Peplau & D. Perlman (Eds.), *Loneliness: A sourcebook of current theory, research and therapy* (pp. 224-237). New York: Wiley-Interscience.

Paloutzian, R. F., Emmons, R. A. & Keortge, S. G. (2010). Spiritual wellbeing, intelligence and healthy workplace policy. In R. A. Giacalone & C. L. Jurkiewicz (Eds), *Handbook of Workplace Spirituality and Organizational Performance* (2nd ed.). (pp. 73-86). New York: M. E. Sharpe.

Parameshwar, S. (2005). Spiritual leadership through ego-transcendence: Exceptional responses to challenging circumstances. *The Leadership Quarterly*, 16(5), 689-722.

Parboteeah, K. P. & Cullen, J. B. (2010). Ethical climates and spirituality: An exploratory examination of theoretical links. In R. A. Giacalone & C. L. Jurkiewicz (Eds), *Handbook of Workplace Spirituality and Organizational Performance* (2nd ed.). (pp. 99-113). New York: M. E. Sharpe.

Pargament, K. I. (1999). The psychology of religion and spirituality? Yes and no.

International Journal for the Psychology of Religion, 9, 3-16.

Pargament, K. L. & Mahoney, A. (2002). Spirituality: Discovering and conserving the sacred. In C. R. Snyder & S. J. Lopez (Eds.), *Handbook of Positive Psychology*. New York: Oxford University Press.

Park, N., Oates, S. & Schwarzer, R. (2013). Christopher Peterson “Other People Matter”. *Applied Psychology: Health and Well-Being*, 5(1), 1-4.

Partridge, C. (2005). *The re-enchantment of the West. Volume 2. Alternative spiritualities, sacralization, popular culture, and occulture*. New York: T&T Clark International.

Pashak, T. J. & Laughter, T. C. (2012). Measuring service-mindedness and its relationship with spirituality and life satisfaction. *College Student Journal*, 46, 183-192.

Patton, M. Q. (1990). *Qualitative Evaluation Methods*. (2nd ed.). Thousand Oaks, California: Sage.

Patton, M. Q. (2002). *Qualitative Evaluation Methods*. (3rd ed.). Thousand Oaks, California: Sage.

Paul, M. (2013). 7 reasons why connection with self and others is so important. *Huffington Post*, January. Accessed on 21 October 2015 from:
http://www.huffingtonpost.com/margaret-paul-phd/loving-connection_b_2559654.html

Pedhauzer, E. J. & Pedhauzer-Schmelkin, L. (1991). *Measurement, design and analysis: An integrated approach*. Hillsdale, New Jersey: Lawrence Erlbaum.

Peirce, P. (2002). *The intuitive way: A guide for living from inner wisdom*. Hillsboro, Oregon: Beyond Words.

Perrone, K. M., Webb, L. K., Wright, S. L., Jackson, Z. V. & Ksiazak, T. M. (2006). Relationship of spirituality to work and family roles and life satisfaction among gifted adults. *Journal of Mental Health Counseling*, 28(3), 253-268.

Peterman, A. H., Fitchett, G., Brady, M. J., Hernandez, L., & Cella, D. (2002). Measuring spiritual well-being in people with cancer: The Functional Assessment of Chronic Illness Therapy – Spiritual Well-Being Scale (FACIT-Sp). *Annals of Behavioral Medicine*, 24, 49 –58.

Peters, T. J. & Waterman, R. H. (1982). *In search of excellence*. New York: Harper & Row.

Peterson, C. (2008). What is positive psychology and what is it not? *Psychology Today*.

Accessed on 24 September 2015 from: <https://www.psychologytoday.com/blog/the-good-life/200805/what-is-positive-psychology-and-what-is-it-not>

Pfeffer, J. (2010). Business and the spirit: Management practices that sustain values. In R.

A. Giacalone & C. L. Jurkiewicz (Eds), *Handbook of Workplace Spirituality and Organizational Performance* (2nd ed.). (pp. 27-43). New York: M. E. Sharpe.

Phipps, K. A. (2012). Strategic spirituality and strategic leadership: The influence of spiritual beliefs on strategic decision making. *Journal of Business Ethics*, 106, 177–189.

Piedmont, R. L. (1999). Does spirituality represent the sixth factor of personality? Spiritual transcendence and the five factor model. *Journal of Personality*, 67 (6), 985-1013.

Piedmont, R. L. (2001). Spiritual transcendence and the scientific study of spirituality - impact on health care -statistical data included. *Journal of Rehabilitation*, 67(1).

Piedmont, R. L., & Leach, M. (2002). Cross-cultural generalizability of the spiritual transcendence scale in India: Spirituality as a universal aspect of human experience. *American Behavioral Scientist*, 45(12), 1888-1901.

- Piedmont, R. L. (2004a). Spiritual transcendence as a predictor of psychosocial outcome from an outpatient substance abuse program. *Psychology of Addictive Behaviors*, 18(3), 213-222.
- Piedmont, R. L. (2004b). The logoplex as a paradigm for understanding spiritual transcendence. *Research in the Social Scientific Study of Religion*, 15, 263-283.
- Piedmont, R. L. (2006). Spirituality as a robust empirical predictor of psychosocial outcomes: A cross-cultural analysis. In R. J Estes (Ed.), *Advancing Quality of Life in a Turbulent World* (pp. 119-135). New York: Springer.
- Piedmont, R. L. (2007). Cross-cultural generalizability of the spiritual transcendence scale to the Philippines: Spirituality as a human universal. *Mental Health Religion & Culture*, 10(2), 89-107.
- Piedmont, R. L., Hassinger, C. J., Rhorer, J., Sherman, M. F., Sherman, N. C. & Williams, J. E. G. (2007). The relations among spirituality and religiosity and Axis II functioning in two college samples. *Research in the Social Scientific Study of Religion*, 15, 53-72.
- Polley, D., Vora, J. & SubbaNarasimba, P. N. (2005). Paying the devil his due: Limits and liabilities of workplace spirituality. *International Journal of Organizational Analysis*, 13(1), 50-63.

Pollock, S. L. (2007). *An investigation of the relationship between graduate counseling students' perceptions of spirituality and counselor self-efficacy in secular and faith-based universities*. Unpublished PhD thesis, Department of Child, Family and Community Sciences, in the College of Education at the University of Central Florida, Orlando, Florida.

Poole, E. (2009). Organisational spirituality: A literature review. *Journal of Business Ethics*, 84, 577-588.

Posner, B. & Schmidt, W. (1993). Values congruence and differences between the interplay of personal and organizational value systems. *Journal of Business Ethics*, 12(5), 341–349.

Postmaterialism. (2012). In *Encyclopaedia Britannica*. Retrieved 27 February 2012, from: <http://www.britannica.com/EBchecked/topic/1286234/postmaterialism>

Preacher, K. J. & Coffman, D. L. (2006). Computing power and minimum sample size for RMSEA [Computer software]. Available from: <http://quantpsy.org/>

Prescott, S. (2000). *Realizing the self within*. Seattle, Washington: Elfin Cove.

Press, W. H., Flannery, B. P., Teukolsky, S. A. & Vetterling, W. T. (1994). *Numerical recipes in Pascal*. Cambridge: Cambridge University Press.

Raosoft. (2004). *Sample size calculator*. Accessed on 18 February 2015 from:

<http://www.raosoft.com/samplesize.html>

Ray, P. & Anderson, S. R. (2000). *The cultural creatives. How 50 million people are changing the world*. New York: Three Rivers Press.

Reave, L. (2005). Spiritual values and practices related to leadership effectiveness. *The Leadership Quarterly*, 16(5), 655–687.

Reed, R. G. (1992). An emerging paradigm for the investigation of spirituality in nursing. *Research in Nursing & Health*, 15 (5), 349-357.

Rego, A. & Cunha, M. P. (2008). Workplace spirituality and organizational commitment: an empirical study. *Journal of Organizational Change Management*, 21(1), 53-75.

Reichheld, F. F. (1996). *The Loyalty Effect*. Boston: Harvard Business School Press.

Reinert, D. F. & Bloomingdale, J. R. (2000). Spiritual experience, religious orientation, and self-reported behavior. *The International Journal for the Psychology of Religion*, 10(3), 173-180.

Reinert, D. F. & Stifler, K. R. (1993). Hood's mysticism scale revisited: A factor-analytic replication. *Journal for the Scientific Study of Religion*, 32(4), 383-388.

Renesch, J. (Ed.). (1992). *New traditions in business*. San Francisco: Berrett-Koehler.

Research Works. (June, 2009). Employee work engagement: Best practices for employers.

Report by Research Works, 1(2), 1-11.

Rich, B. L., Lepine, J. A. & Crawford, E. R. (2010). Job engagement: Antecedents and effects of job performance. *Academy of Management Journal*, 53, 617–635.

Richards, P. S., Smith, T., Schowalter, M., Richard, M., Berrett, M. E. & Hardman, R. K.

(2005). Development and validation of the theistic Spiritual Outcome Survey.

Psychotherapy Research, 15, 457–469.

Robbins, S. P., Judge, T. A., Millett, B. & Boyle, M. (2011). *Organisational Behaviour* (6th ed.).

Australia: Pearson Education, Prentice-Hall.

Roberts, R. R. & Davenport, T. O. (2002). Job engagement: Why it's important and how to improve it. *Employment Relations Today*, 29(3), 21–29.

Robertson, B. J. (2015). *Holacray: The new management system for a radically changing world*. New York: Henry Holt & Company.

Robinson, K. & Aronica, L. (2009). *The element: How finding your passion changes everything*. New York: Penguin Books.

Robinson, D., Perryman, S. & Hayday, S. (2004). *The drivers of employee engagement*.

Report 408 [White Paper]. London: Institute for Employment Studies.

Robson, C. (2002). *Real world research*. (2nd ed.). Oxford: Blackwell.

Rodik, P. & Primorac, J. (2015). To use or not to use: Computer-Assisted Qualitative Data Analysis Software usage among early-career sociologists in Croatia. *Forum Qualitative Sozialforschung/Forum: Qualitative Social Research*, 16(1), Art. 12. Retrieved on 1 August 2016 from: <http://www.qualitative-research.net/index.php/fqs/article/view/2221/3758#g411>

Rogers, C. R. (1951). *Client-centered therapy: Its current, practice, implications and theory*. Boston: Houghton-Mifflin.

Roof, R. A. (2015). The association of individual spirituality on employee engagement: The spirit at work. *Journal of Business Ethics*, 130, 585-599.

Rosso, B. D., Dekas, K. H. & Wrzesniewski, A. (2010). On the meaning of work: A theoretical integration and review. *Research in Organizational Behavior*, 30, 91–127.

Rothmann, S. (2008). Job satisfaction, occupational stress, burnout and work engagement as components of work-related wellbeing. *South African Journal for Industrial Psychology*, 34 (3), 11-16.

- Rothmann, S. & Buys, C. (2011). Job demands and resources, psychological conditions, religious coping and work engagement of reformed church ministers. *Journal of Psychology in Africa*, 21, 173-185.
- Rothmann, S. & Colff, J. (2009). Occupational stress, sense of coherence, coping, burnout and work engagement of registered nurses in South Africa. *South African Journal of Industrial Psychology*, 35 (1), 423-432.
- Rothmann, S. & Jordaan, G. (2006). Job demands, job resources and work engagement of academic staff in South African higher education institutions. *South African Journal of Industrial Psychology*, 32 (4), 87-96.
- Rothmann, S., Jorgensen, L. I. & Marais, C. (2011). Coping and work engagement in selected South African organisations. *South African Journal of Industrial Psychology*, 37(1), 107–117.
- Rothmann, S. & Storm, K. (2003). A psychometric analysis of the Utrecht Work Engagement Scale in the South African Police Service. *South African Journal of Industrial Psychology*, 29 (4), 62-70.
- Rucci, A. J., Kirn, S. P. & Quinn, R. T. (1998). The employee-customer-profit chain at Sears. *Harvard Business Review*, 76(1), 82–97.

Rutte, M. (2003). *Spirituality in the workplace*. Retrieved on 4 May 2012 from:

<http://www.martinrutte.com/>

Ryan, K. & Fiorito, B. (2003). Means-ends spirituality questionnaire: Reliability, validity, and relationship to psychological well-being. *Review of Religious Research*, 45(2), 130-154.

Saks, A. M. (2006). Antecedents and consequences of employee engagement. *Journal of Managerial Psychology*, 21, 600-619.

Saks, A. M. (2011). Workplace spirituality and employee engagement. *Journal of Management, Spirituality & Religion*, 8(4), 317-340.

Salanova, M., Agut, S. & Peiro, J. M. (2005). Linking organizational resources and work engagement to employee performance and customer loyalty: The mediation of service climate. *Journal of Applied Psychology*, 90, 1217–1227.

Salanova, M., Schaufeli, W. B., Llorens, S., Peiró, J. M. & Grau, R. (2001). Desde el “burnout” al “engagement”: una nueva perspectiva [From “burnout” to “engagement”: A new perspective]. *Revista de Psicología del Trabajo y de las Organizaciones*, 16, 117-134.

- Sanders, J. E. III, Hopkins, W. E. & Geroy, G. D. (2003). From transactional to transcendental: toward an integrated theory of leadership. *Journal of Leadership and Organizational Studies*, 9(4), 21-31.
- Sanders, J. E., Hopkins, W. E. & Geroy, G. D. (2005). A causal assessment of the spirituality-leadership-commitment relationship. *Journal of Management, Spirituality & Religion*, 2, 39-66.
- Sass, J. (2000). Characterizing organization spirituality: An organizational communication culture approach. *Communication Studies*, 51(3), 195–217.
- Satorra, A. & Saris, W. E. (1985). Power of the likelihood ratio test in covariance structure analysis. *Psychometrika*, 50, 83–90.
- Saunders, M., Lewis, P. & Thornhill, A. (2009). *Research methods for business students*. (5th ed.). Edinburgh Gate, Harlow, England: Pearson Education.
- Schaufeli, W. B. (2013). What is engagement? In C. Truss, K. Alfes, R. Delbridge, A. Shantz & E. Soane (Eds.). *Employee Engagement in Theory and Practice*. London: Routledge.
- Schaufeli, W. B., & Bakker, A. B. (2003a). UWES: Utrecht Work Engagement Scale: Test manual. *Unpublished manuscript*, Department of Psychology, Utrecht University.

- Schaufeli, W. B. & Bakker, A. (2003b). Utrecht Work Engagement Scale. *Occupational Health Psychology Unit, Utrecht University*. November, 1-58.
- Schaufeli, W. B. & Bakker, A. B. (2004). Job demands, job resources, and their relationship with burnout and engagement: A multi-sample study. *Journal of Organizational Business*, 25, 293–315.
- Schaufeli, W. B. & Bakker, A. B. (2010). Defining and measuring work engagement: Bringing clarity to the concept. In A. B. Bakker & M. P. Leiter (Eds.), *Work engagement: A handbook of essential theory and research* (pp. 10–24). Hove, England: Psychology Press.
- Schaufeli, W. B., Bakker, A. & Salanova, M. (2006). The measurement of work engagement with a short questionnaire: A cross-national study. *Educational and Psychological Measurement*, 66, 701–716.
- Schaufeli, W. B., Salanova, M., Gonzalez-Roma, V. & Bakker, A. B. (2002). The measurement of engagement and burnout: A two-sample confirmatory factor analytic approach. *Journal of Happiness Studies*, 3, 71–92.
- Schaufeli, W. B., Taris, T. W. & Van Rhenen, W. (2008). Workaholism, burnout and engagement: Three of a kind or three different kinds of employee well-being? *Applied Psychology: An International Review*, 57, 173-203.

- Schenström, A., Rönnerberg, S. & Bodlund, O. (2006). Mindfulness-based cognitive attitude training for primary care staff: A pilot study. *Complementary Health Practice and Review*, 11(3), 144-152.
- Schermerhorn, J. R., Hunt, J. G., Osborn, R. N., & Uhl-Bien, M. (2011). *Organizational Behavior* (11th ed.). Asia: John Wiley & Sons.
- Schermelleh-Engel, K., Moosbrugger, H. & Müller, H. (2003). Evaluating the fit of structural equation models: Tests of significance and descriptive goodness-of-fit measures. *Methods of Psychological Research Online*, 8(2), 23-74.
- Schor, J. B. (1991). *The overworked American*. New York: Basic Books.
- Schumacker, R. E. & Lomax, R. G. (2004). A beginner's guide to structural equation modeling, (2nd ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- Schwab, D. (1980). Construct validity in organisational behaviour. *Organisational Behaviour*, 2, 3-43.
- Schwab, K. & Sala-i-Martin, X. (2014-2015). Global Competitiveness Report. *World Economic Forum*. Accessed on 29 January 2015 from: <http://www.weforum.org/reports/global-competitiveness-report-2014-2015>

- Schwartz, S. H. (1992). Universals in the content and structure of values: Theory and empirical tests in 20 Countries. In M. Zanna (Ed.), *Advances in Experimental Social Psychology* (Vol. 25) (pp. 1-65). New York: Academic Press.
- Scott, W. R. (2004). Reflections on a half-century of organizational sociology. *Annual Review of Sociology*, 30, pp. xii, 1-21.
- Secrest, J., Iorio, D. H. & Martz, W. (2005). The meaning of work for nursing assistants who stay in long-term care. *Journal of Clinical Nursing*, 14(8B), 90-97.
- Seidlitz, L., Abernethy, A. D., Duberstein, P. R., Evinger, J. S., Chang, T. H. & Lewis, B. L. (2002). Development of the Spiritual Transcendence Index. *Journal for the Scientific Study of Religion*, 41(3), 439-453.
- Selby, J. (2004). *Quiet your mind*. London: Rider.
- Seligman, M. E. P. (2008). Positive health. *Applied Psychology: An International Review*, 57, 3–18.
- Sendjaya, S. (2015). *Personal and organizational excellence through servant leadership*. Switzerland: Springer International.

- Seppala, E. (2013). The compassionate mind: Science shows why it's healthy and how it spreads. *Observer*, 26(5), 1-4. Retrieved on 20 November 2015 from:
<http://www.psychologicalscience.org/index.php/publications/observer/2013/may-june-13/the-compassionate-mind.html>
- Seppälä, P. (2013). *Work Engagement: Psychometrical, psychosocial and psychophysiological approach*. Unpublished dissertation, Faculty of Social Sciences of the University of Jyväskylä, Finland.
- Seppälä, P., Mauno, S., Feldt, T., Hakanen, J., Kinnunen, U., Tolvanen, A. & Schaufeli, W. (2009). The construct validity of the Utrecht Work Engagement Scale: Multi-sample and longitudinal evidence. *Journal of Happiness Studies*, 10, 459–481.
- Shafranske, E. P. & Gorsuch, R. L. (1984). Factors associated with the perception of spirituality in psychotherapy. *Journal of Transpersonal Psychology*, 16, 231-241.
- Shankar Pawar, B. (2009a). Individual spirituality, workplace spirituality and work attitudes: An empirical test of direct and interaction effects. *Leadership and Organizational Development Journal*, 30(8), 759-777.
- Shankar Pawar, B. (2009b). Some of the recent organizational behavior concepts as precursors to workplace spirituality. *Journal of Business Ethics*, 88, 245-261.

- Shankar Pawar, B. (2014). Leadership spiritual behaviors toward subordinates: An empirical examination of the effects of a leader's individual spirituality and organizational spirituality. *Journal of Business Ethics*, 122, 439-452.
- Sharma, S., Mukherjee, S., Kumar, A. & Dillon, W.R. (2005). A simulation study to investigate the use of cut-off values for assessing model fit in covariance structure models. *Journal of Business Research*, 58 (1), 935-43.
- Sheep, M. L. (2004). Nailing down gossamer: A valid measure of the person-organization fit of workplace spirituality. *Best Paper Proceedings of the Sixty-Third Annual Meeting of the Academy of Management*, B1-B6.
- Sheep, M. L. (2006). Nurturing the whole person: The ethics of workplace spirituality in a society of organizations. *Journal of Business Ethics*, 66, 357–375.
- Sheridan, M. J. & Amato-von Hemert, K. (1999). The role of religion and spirituality in social work education and practice: A survey of student views and experiences. *Journal of Social Work Education*, 35(1), 125-141.

Sheridan, M. J., Bullis, R. K., Adcock, C. R., Berlin, S. D. & Miller, P. C. (1992).

Practitioners' personal and professional attitudes and behaviours toward religion and spirituality: Issues for social work education and practice. *Journal of Social Work Education*, 28(2), 190-203.

Sheridan, M. J., Wilmer, C. M. & Atcheson, L. (1994). Inclusion of content on religion and spirituality in the social work curriculum: A study of faculty views. *Journal of Social Work Education*, 30(3), 363-376.

Shimazu, A., Schaufeli, W. B., Kosugi, S., Suzuki, A., Nashiwa, H., Kato, A., et al. (2008). Work engagement in Japan: Development and validation of the Japanese version of the Utrecht Work Engagement Scale. *Applied Psychology: An International Review*, 57, 510-523.

Sikorska-Simmons, E. (2005). Religiosity and work-related attitudes among paraprofessional and professional staff in assisted living. *Journal of Religion, Spirituality and Aging*, 18(1), 65-82.

Simpson, D. B., Cloud, D. S., Newman, J. L. & Fuqua, D. R. (2008). Sex and gender differences in religiousness and spirituality. *Journal of Psychology and Theology*, 36(1), 42-52.

Sirota, D., Mischkind, L. A. & Meltzer, M. I. (2005). *The enthusiastic employee: How companies profit by giving workers what they want*. Upper Saddle River, New Jersey, USA: Wharton School Publishing.

Smith, D. P. J. & Katz, R. (2006). *Spiritual leadership: Readings for MBA elective*. Stellenbosch, South Africa: Business School, University of Stellenbosch.

Smith, D. P. J. & Louw, M. (2007). Conceptualisation of the spiritual life dimension: A personal and professional leadership perspective. *South African Journal of Human Resource Management*, 5(1), 19-27.

Smith, D. P. J. & Smith, D. (2008). *Mapping the realm of spirit*. Johannesburg: Minuteman Press.

Smith, E. E. (2013). Social connection makes a better brain. *The Atlantic*. Accessed on 21 October 2015 from: <http://www.theatlantic.com/health/archive/2013/10/social-connection-makes-a-better-brain/280934/>

Smith, H. W. (1994). *The ten natural laws of successful time and life management: Proven strategies for increased productivity and inner peace*. New York: Warner Books.

Smith, N. R. (2006). *Workplace spirituality: A complete guide for business leaders*. New York: Axial Age Publishing.

- Snyder, C. R., Lopez, S. J. & Pedrotti, J. T. (2015). *Positive psychology: The scientific and practical explorations of human strengths*. California: Sage.
- Solinger, O. N. Van Olffen, W., & Roe, R. A. (2008). Beyond the three-component model of organizational commitment. *Journal of Applied Psychology*, 93(1), 70-83.
- Sonnentag, S. (2003). Recovery, work engagement, and proactive behavior: A new look at the interface between non-work and work. *Journal of Applied Psychology*, 88(3), 518–528.
- Soper, D. (2016). A-priori sample size calculator for structural equation models. Accessed on 31 July 2016 from: <http://www.danielsoper.com/statcalc/calculator.aspx?id=89>
- SouthAfrica.info. (2015). *South Africa: Fast facts*. Retrieved on 12 October 2015 from: <http://www.medioclubsouthafrica.com/landstatic/82-fast-facts>
- South African Government Communication and Information System. (2012). *Pocket Guide to South Africa 2012*. Retrieved on 12 October 2015 from: http://www.gcis.gov.za/sites/default/files/docs/resourcecentre/pocketguide/004_saspeople.pdf

- Sprung, J. M., Sliter, M. T. & Jex, S. M. (2012). Spirituality as a moderator of the relationship between workplace aggression and employee outcomes. *Personality and Individual Differences*, 53, 930–934.
- Stanard, R. B., Sandhu, D. S. & Painter, L. C. (2000). Assessment of spirituality in counselling. *Journal of Counseling & Development*, 78, 204-210.
- Stapleton, C. D. (1997). Basic concepts and procedures of confirmatory factor analysis. *Paper presented at the Annual Meeting of the Southwest Educational Research Association*, Austin: Texas, January 23-25.
- Statistics South Africa. (2005). *Achieving a better life for all: Progress between Census '96 and Census 2001*. Accessed on 25 April 2015 from:
<http://www.statssa.gov.za/publications/Report-03-02-16/Report-03-02-16.pdf>.
- Statt, D. A. (2004). *Psychology and the world of work*. (2nd ed.). New York: Palgrave Macmillan.
- Stebbins, L. H. (2010). Development of reality system theory. *Journal of Business & Economics Research*, 8(4), 1-22.

Steger, M.F. & Dik, B.J. (2010). Work as meaning. In P.A. Linley, S. Harrington, & N. Page (Eds.), *Oxford handbook of positive psychology and work* (pp. 131–142). Oxford: Oxford University Press.

Steiger, J. H. (1990). Structural model evaluation and modification: An interval estimation approach. *Multivariate Behavioural Research*, 25, 173-180.

Stevinson, M., Dent, E. & White, D. (2009). Toward a greater understanding of spirit at work. *Academy of Management Proceedings*, 1-6.

Storm, K. & Rothmann, I. (2003). A psychometric analysis of the Utrecht Work Engagement Scale in the South African police service. *South African Journal of Industrial Psychology*, 29, 62-70.

Strack, G., Fottler, M. D., Wheatley, M. J. & Sodomka, P. (2002). Spirituality and effective leadership in health care: is there a combination? *Frontiers of Health Services Management*, 18(4), 3-17.

Suárez, S. A. (2015). Effects of spirituality in the workplace. *Proceedings of the Academy of Organizational Culture, Communications and Conflict*. 20(1), 9-13.

Suhr, D. D. (n.d.). *The basics of structural equation modelling*. Tutorial Guide, University of Northern Colorado, 1-18, Accessed on 25 April 2015 from:

<http://www.lexjansen.com/wuss/2006/tutorials/TUT-Suhr.pdf>.

Suhr, D. D. (2006). Exploratory or confirmatory factor analysis? *Statistics and Data Analysis*, 200(31), Accessed on 2 April 2015

from: <http://www2.sas.com/proceedings/sugi31/200-31.pdf>

Sullivan, S. (2004). Making the business case for health and productivity management. *Journal of Occupational and Environmental Medicine*, 46(6), S56-S61.

SurveyMonkey. (n.d.). Survey sample size. [Online article]. Accessed on 17 February 2015 from: <https://www.surveymonkey.com/mp/sample-size/>

SurveyMonkey. (2015). *Sample size calculator*. Accessed on 18 February 2015 from: <https://www.surveymonkey.com/blog/en/sample-size-calculator/>

Tabachnick, B. G. & Fidell, L. S. (2001). *Using Multivariate Statistics*. Boston: Allyn and Bacon.

Tabachnick, B.G. & Fidell, L.S. (2007). *Using multivariate statistics*. (5th ed.). New York: Allyn & Bacon.

- Tanaka, J. S. (1993). Multifaceted conceptions of fit in structure equation models. In K. A. Bollen & J.S. Long (Eds.), *Testing structural equation models* (pp. 136-162). Newbury Park, California: Sage.
- Tarnas, R. (2007). *Cosmos and psyche. Intimations of a new world view*. New York: Plume Printing.
- Tart, C. (1975). Introduction. In C. T. Tart (Ed.), *Transpersonal Psychologies* (pp. 3-7). New York: Harper & Row.
- Tarvin, A. (2014). The importance of relationships in the workplace. *Humor That Works*. Accessed on 20 November 2015 from: <http://www.humorthatworks.com/learning/the-importance-of-relationships-in-the-workplace/>
- Tashakkori, A. & Teddlie, C. (1998). *Mixed methodology: combining qualitative and quantitative approaches*. *Applied Social Research Methods Series*, 46. Thousand Oaks: Sage.
- Taylor, C. & Gibbs, G. R. (2010). *How and what to code*. Online QDA. Accessed on 21 October 2015 from: http://onlineqda.hud.ac.uk/Intro_QDA/how_what_to_code.php

- Taylor, R. J., Chatters, L. M. & Jackson, J. S. (2007). Religious and spiritual involvement among older African Americans, Caribbean Blacks, and Non-Hispanic whites: Findings from the National Survey of American Life. *The Journal of Gerontology Series B: Psychological Sciences and Social Sciences*, 62 (4), S238-S250.
- Tepper, B. J. (2010). Organizational citizenship behavior and the spiritual employee. In R. A. Giacalone & C. L. Jurkiewicz (Eds), *Handbook of Workplace Spirituality and Organizational Performance* (2nd ed.). (pp. 143-152). New York: M. E. Sharpe.
- Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. New York: Falmer.
- Thomason, C. L. & Brody, H. (1999). Inclusive spirituality. *Journal of Family Practice*, 48(2), 96-97.
- Thompson, W. D. (2000). Can you train people to be spiritual? *Training and Development*, 54, 18-19.
- Thompson, B. (2004). *Exploratory and confirmatory factor analysis: Understanding concepts and applications*. Washington DC: American Psychological Association.
- Tierney, T. J. (2011). Collaborating for the common good. *Harvard Business Review*, 89(7/8), 38.

Tischler, L., Biberman, J., & McKeage, R. (2002). Linking emotional intelligence, spirituality and workplace performance: Definitions, models and ideas for research, *Journal of Managerial Psychology*, 17, 203-218.

Tischler, L., Biberman, J. & Altman, Y. (2007). A model for researching about spirituality in Organizations. *Business Renaissance Quarterly*, 2(2), 23-37.

Tolle, E. (2005). *The power of now: A guide to spiritual enlightenment*. London: Hodder & Stoughton.

Tomarken, A. J. & Waller, N. G. (2005). Structural equation modeling: Strengths, limitations, and misconceptions. *Annual Review of Clinical Psychology*, 1, 31–65.

Tombaugh, J. R., Mayfield, C. & Durand, R. (2011). Spiritual expression at work: Exploring the active voice of workplace spirituality. *International Journal of Organizational Analysis*, 19(2), 146-170.

Trading Economics. (2015). *South Africa population*. Accessed on 18 February 2015 from: <http://www.tradingeconomics.com/south-africa/population>

Travis, J. W. & Ryan, R. S. (2004). *Wellness workbook: How to achieve enduring health and vitality*. (3rd ed.). Berkeley, California: Celestial Arts.

- Tuck, I. (2004). Development of a spirituality intervention to promote healing. *Journal of Theory Construction & Testing*, 8(2), 67-71.
- Tucker, L. R. & Lewis, C. (1973). A reliability coefficient for maximum likelihood factor analysis. *Psychometrika*, 38, 110.
- Ullman, J. B. (2001). Structural equation modeling. In B. G. Tabachnick & L. S. Fidell (2001). *Using Multivariate Statistics* (4th ed), (pp. 653- 771). Needham Heights, Massachusetts: Allyn & Bacon.
- Ulrich, D. (1997). *Human resource champions*. Boston, Massachusetts: Harvard Business School Press.
- Underwood, L. G. & Teresi, J. A. (2002). The Daily Spiritual Experience Scale: Development, theoretical description, reliability, exploratory factor analysis, and preliminary construct validity using health-related data. *Annals of Behavioral Medicine*, 24(1), 22-33.
- Underwood, L. G. (2006). Ordinary spiritual experience: Qualitative research, interpretive guidelines, and population distribution for the Daily Spiritual Experience Scale. *Archive for the Psychology of Religion/Archiv fuer Religionspsychologie*, 28(1), 181-218.
- Underwood, L. G. (2011). The Daily Spiritual Experience Scale: Overview and results. *Religions*, 2(1), 29-50.

Vaill, P. (1991). *Managing as a performing art: New ideas for a world of chaotic change*.

San Francisco: Jossey-Bass.

Vance, R. J. (2006). *Employee engagement and commitment*. Alexandria, Virginia: Society for Human Resource Management.

Van Der Walt, F. (2007). *The relationship between spirituality and job satisfaction*. PHD Dissertation. Pretoria, South Africa: University of Pretoria.

Van Der Walt, F. & De Klerk, J. J. (2014a). Measuring spirituality in South Africa: Validation of instruments developed in the USA. *International Review of Psychiatry*, 26(3), 368–378.

Van Der Walt, F. & De Klerk, J. J. (2014b). Workplace spirituality and job satisfaction. *International Review of Psychiatry*, 26(3), 379–389.

Van Der Walt, F. & De Klerk, J. J. (2015). The experience of spirituality in a multi-cultural work environment. *World Academy of Researchers, Educators, and Scholars in Business, Social Sciences, Humanities and Education (In association with the Academy of World Finance, Banking, Management and IT) Congress Proceedings*. 1(1), July 2015.

Van Zyl, L. E., Deacon, E. & Rothmann, S. (2010). Towards happiness: Experiences of work-role fit, meaningfulness and work engagement of industrial/organisational psychologists in South Africa. *SA Journal of Industrial Psychology*, 36(1).

- Vaughn, F. (1979). Spiritual issues in psychotherapy. *Journal of Transpersonal Psychology*, 23, 105-119.
- Vaughan, F., Wittine, B. & Walsh, R. (1998). Transpersonal psychology and the religious person. In E. P. Shafranske (Ed.), *Religion and the Clinical Practice of Psychology* (pp. 483-509). Washington DC: American Psychological Association.
- Veach, T. L. & Chappel, J. N. (1991). Measuring spiritual health: A preliminary study. *Substance Abuse*, 13, 139-149.
- Velicer, W. F. & Fava, J. L. (1998). Effects of variable and subject sampling on factor pattern recovery. *Psychological Methods*, 3(2), 231-251.
- Venter, J. M. (2012). The relationship between psychological career resources and engagement at a South African software and services organisation. *Unpublished masters' dissertation*, Faculty of Economic and Management Sciences, University of Pretoria.
- Visser, A., Garssen, B. & Vingerhoets, A. (2010). Spirituality and well-being in cancer patients: A review. *Psycho-Oncology*, 19, 565-572.
- Vokey, D. (2000). Longing to connect: Spirituality in public schools. *Paideusis*, 13 (2), 23-41.

- Wagner-March, F. & Conely, J. (1999). The fourth wave: The spiritually-based firm. *Journal of Organizational Change Management*, 12, 292-301.
- Wallis, S. (2012). *Z-squared: The origin and application of χ^2* . Accessed on 26 April 2015 from: <https://corplingstats.wordpress.com/2012/03/31/z-squared/>
- Warr, P. (2007). *Work, happiness, and unhappiness*. Mahwah, New Jersey: Lawrence Erlbaum.
- Watkins, D. (1989). The role of confirmatory factor analysis in cross-cultural research. *International Journal of Psychology*, 24, 685 – 701.
- Watson, P. J. & Morris, R. J. (2005). Spiritual experience and identity: Religious orientation, religious interest, and intolerance of ambiguity. *Review of Religious Research*, 46(4), 371-379.
- Wefald, A. J. & Downey, R. G. (2008). Job engagement in organizations: Fad, fashion or folderol? *Journal of Organizational Behavior*, 30, 141-145.
- Wefald, A. J. & Downey, R. G. (2009). Construct dimensionality of engagement and its relations with satisfaction. *The Journal of Psychology*, 143 (1), 91-112.

- Wellins, R. & Concelman, J. (2005). Creating a culture for engagement. *Workforce Performance Solutions*. Online. Retrieved on 7 February 2015 from:
www.ddiworld.com/pdf/wps_engagement_ar.pdf
- Wheat, L. W. (1991). Development of a scale for the measurement of human spirituality. *Doctoral dissertation*. College Park: University of Maryland. Dissertation Abstracts International 52–09A, 3230.
- Wheatley, M. J. (1992). *Leadership and the new science*. San Francisco: Berrett-Koehler.
- Wheaton, B., Muthen, B., Alwin, D., F. & Summers, G. (1977). Assessing reliability and stability in panel models. *Sociological Methodology*, 8 (1), 84-136.
- Winter, R., Taylor, T. & Sarros, J. (2000). Trouble at Mill: Quality of academic work-life issues within a comprehensive Australian University. *Studies in Higher Education*, 25 (3), 279-294.
- Wolcott, H. F. (1994). *Transforming qualitative data: Description, analysis and interpretation*. Thousand Oaks, California: Sage.
- Wolf, E. J., Harrington, K. M., Clark, S. L. & Miller, M. W. (2013). Sample size requirements for structural equation models: An evaluation of power, bias and solution propriety. *Educational and Psychological Measurement*, 73(6), 913–934.

- Wong, J. Y. & Torres, R. (2005). Research commentary on the Spirituality Scale. *Journal of Holistic Nursing*, 23(2), 168-171.
- Wright, M. (2004). Hospice care and models of spirituality. *European Journal of Palliative Care*. pp. 75-78
- Wong, P. T. P. (1998). Meaning-centred counselling. In P. T. P. Wong & P. Fry (Eds), *The human quest for meaning: A handbook of psychological research and clinical applications* (pp. 395-435). Mahwah, New Jersey: Lawrence Erlbaum.
- Xanthopoulou, D., Bakker, A. B., Demerouti, E. & Schaufeli, W. B. (2009). Reciprocal relationship between job resources, personal resources and work engagement. *Journal of Vocational Behavior*, 74 (3), 235-244.
- Xanthopoulou, D., Bakker, A. B., Kantas, A. & Demerouti, E. (2012). Measuring burnout and work engagement: Factor structure, invariance, and latent mean differences across Greece and the Netherlands. *International Journal of Business Science and Applied Management*, 7(2), 40-52.
- Yalabik, Z. Y., Van Rossenberg, Y., Kinnie, N. & Swart, J. (2015). Engaged and committed? The relationship between work engagement and commitment in professional service firms. *The International Journal of Human Resource Management*, 26(12), 1602-1621.

- Yao, X., Lee, T.W., Mitchell, T.R., Burton, J.P. & Sablinski, C.S. (2004). Job embeddedness: Current research and future directions. In R. Griffeth & P. Hom (Eds.), *Understanding employee retention and turnover* (pp. 153-187). Greenwich, Connecticut: Information Age.
- Yi-Wen, Z. & Yi-Qun, C. (2005). The Chinese version of the Utrecht Work Engagement Scale: An examination of reliability and validity. *Chinese Journal of Clinical Psychology*, 13, 268-270.
- Young, J. S., Cashwell, C. S., & Woolington, V. J. (1998). The relationship of spirituality to cognitive and moral development and purpose in life: An exploratory investigation. *Counseling & Values*, 43, 63-69.
- Zeitgeist Movement. (2015). Available on: <http://www.thezeitgeistmovement.com/>
- Zellars, K. L., Perrewé, P. L. & Brees, J. R. (2010). The multiple roles of spirituality in occupational stress and well-being. In R. A. Giacalone & C. L. Jurkiewicz (Eds), *Handbook of Workplace Spirituality and Organizational Performance* (2nd ed.). (pp. 3-26). New York: M. E. Sharpe.
- Zinnbauer, B. J. (1997). Capturing the meaning of religiousness and spirituality: One way down from a definitional tower of Babel. *PhD dissertation*. Bowling Green State University. Dissertation Abstracts International, 59(12), 6500.

- Zinnbauer, B. J. & Pargament, K. I. (2005). Religiousness and spirituality. In R. F. Paloutzian & C. L. Park (Eds.). *Handbook of the psychology of religion and spirituality* (pp. 21-42). New York: Guilford Press.
- Zinnbauer, B. J., Pargament, K. I., Cole, B., Rye, M. S., Butter, E. M., Belavich, T. G. & Kadar, J. L. (1997). Religion and Spirituality: Unfuzzing the fuzzy. *Journal for the Scientific Study of Religion*, 36, 549–564. doi:10.2307/1387689.
- Zinnbauer, B. J., Pargament, K. I. & Scott, A. B. (1999). The emerging meanings of religiousness and spirituality: Problems and prospects. *Journal of Personality*, 67(6), 889-919.
- Zohar, D. & Marshall, I. (2000). *Spiritual intelligence, the ultimate intelligence*. London: Bloomsbury.
- Zohar, D. & Marshall, I. (2004). *Spiritual capital: Wealth we can live by*. London: Bloomsbury.

APPENDIX A

- Permission Letter -



Letter of request for participation in an academic research study
Department of Human Resource Management

Research conducted by:

Ms. C. Breytenbach (11323702)

Cell: 072 305 0000

RE: STUDY ON MEANINGFUL WORK

To:

I am conducting research as part of a PhD in Organisational Behaviour at the University of Pretoria. I am specifically interested in what makes work more meaningful. Researchers consistently indicate that people who find their work meaningful and work for organisations they feel care for them tend to be more productive, more motivated and more committed. It would therefore benefit both employees and employers to learn what makes work more meaningful. The study will be conducted in an ethically sound and responsible manner.

The research study will consist of an online survey instrument, combined with a small number of semi-structured personal interviews. I would like to request that the purpose of the study be communicated via a company e-mail. In this e-mail a link to an online survey instrument will be provided to participants. Participants will indicate their consent to participate in the study by clicking on the link in the e-mail. The survey instrument should not take longer than 30 minutes to complete.

Survey respondents will be asked to provide their names when completing the questionnaire and informed that they may be contacted by me, the researcher, and invited to participate in a follow-up interview. Only twelve individuals from all respondents working within different organisations participating in this study will be selected for 45-minute interviews to find out what gives their work meaning and what their organisations can do to help them find more

meaning at work. Not all of these individuals will thus be working for your particular organisation. Confidentiality of responses is guaranteed as only I will be able to link their names to their responses. Pseudonyms will be used when reporting on the findings and only generalised findings will be reported. Participation in both the survey and the semi-structured personal interviews is completely voluntary. I am also happy to make the general results of the study available to both participants and the company.

The identity of (insert organisation name) and its employees will remain confidential throughout the dissertation and in any future publications derived from it.

I hereby ask permission to conduct the above mentioned research at (insert organisation name).

In order to fulfil the objectives outlined above, I would need your organisation to send out a global e-mail to all employees asking them to participate in the survey. I will provide you with a link to the survey that you should include in the e-mail to employees. Individual employees could then provide me with their contact details if they agree to participate in the research study. Please advise whether you would regard the above arrangements as feasible. Please do not hesitate to contact me on the number listed below should you require any additional information regarding the above arrangements. I look forward to hearing from you and thank you for your kind consideration of my request.

Yours sincerely

Researcher:

Chantal Breytenbach
Department of Human Resources
Management
Faculty of Management Sciences
University of Pretoria
Contact nr: 072 305 0000
E-mail: chantal.brey@gmail.com

Research Supervisor:

Professor Mias De Klerk
Department of Human Resource
Management
Faculty of Management Sciences
University of Pretoria
Contact nr: 011 344 0219
E-mail: miasdeklerk@gmail.com

Please sign the form to indicate that:

- You have read and understand the information provided above.
- You give your consent for your organisation to participate in the study on a voluntary basis.

Signature:

Date:

APPENDIX B

- Introduction to study and Informed consent for research survey -

Informed consent for participation in an academic research study
Department of Human Resource Management

MEANINGFUL WORK

Research conducted by:

Ms. C. Breytenbach (11323702)

Cell: 072 305 0000

Dear Respondent

You are invited to participate in an academic research study conducted by Chantal Breytenbach, a doctoral student from the Department of Human Resource Management at the University of Pretoria. The purpose of the study is to determine if individuals who find their work meaningful and who work for organisations they feel care for them are more productive, more motivated and more committed. We would like to learn more about your perception about your workplace and your experiences of meaning at work.

This research project is endorsed by your organisation's top management. Please be so kind as to participate in this important research project by following the link in this e-mail and completing the online survey, which will take you approximately 30 minutes to complete. Be assured that any information provided in this survey, will be treated with strict confidence and will be used for research purposes only. The researcher requires your name and contact details to contact you for a follow-up interview. However, only the researcher will be able to link your name to your responses. Pseudo names will be used in reporting on the information you provide to the researcher. Please answer all the questions in an honest manner. There are no right or wrong answers to any of the questions. The researcher is interested in your personal view. You should respond to each item in the survey in a way that best reflects how you truly think or feel.

Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences. You are requested to personally complete the survey. Should it not be possible to complete it personally, rather do not return it at all. Forwarding it to someone else for completion will affect the validity of the results and conclusions. The results of the study will be used for academic purposes only and may be published in an academic journal. Should you be interested in receiving feedback regarding the findings of this study, please complete the relevant section at the end of the survey. The results of the study will then be sent to you.

Your time and input is valued and appreciated.

Yours sincerely

Researcher:

Chantal Breytenbach
Department of Human Resources
Management
Faculty of Management Sciences
University of Pretoria
Contact nr: 072 305 0000
E-mail: chantal.brey@gmail.com

Research Supervisor:

Professor Mias De Klerk
Department of Human Resource
Management
Faculty of Management Sciences
University of Pretoria
Contact nr: 011 344 0219
E-mail: miasdeklerk@gmail.com

By clicking on the link below, you indicate that:

- You have read and understand the information provided above.
- You give your consent to participate in the study on a voluntary basis.

APPENDIX C

- Introductory e-mail and informed consent for second sampling phase -



Informed consent for participation in an academic research study
Department of Human Resource Management

MEANINGFUL WORK

Research conducted by:

Ms. C. Breytenbach (11323702)

Cell: 072 305 0000

Dear Respondent

You are invited to participate in an academic research study conducted by Chantal Breytenbach, a doctoral student from the Department of Human Resource Management at the University of Pretoria. The purpose of the study is to determine if individuals who find their work meaningful and who work for organisations they feel care for them are more productive, more motivated and more committed. We would like to learn more about your perception about your workplace and your experiences of meaning at work.

Please be so kind as to participate in this important research project by following the link in this e-mail and completing the online survey, which will take you approximately 30 minutes to complete. Be assured that any information provided in this survey, will be treated with strict confidence and will be used for research purposes only. The researcher requires your name and contact details to contact you for a follow-up interview. However, only the researcher will be able to link your name to your responses. Pseudo names will be used in reporting on the information you provide to the researcher. Please answer all the questions in an honest manner. There are no right or wrong answers to any of the questions. The researcher is interested in your personal view. You should respond to each item in the survey in a way that best reflects how you truly think or feel.

Your participation in this study is very important to us. You may, however, choose not to participate and you may also stop participating at any time without any negative consequences. You are requested to personally complete the survey. Should it not be possible to complete it personally, rather do not return it at all. Forwarding it to someone else for completion will affect the validity of the results and conclusions. The results of the study will be used for academic purposes only and may be published in an academic journal. Should you be interested in receiving feedback regarding the findings of this study, please complete the relevant section at the end of the survey. The results of the study will then be sent to you.

Your time and input is valued and appreciated.

Yours sincerely

Researcher:

Chantal Breytenbach
Department of Human Resources
Management
Faculty of Management Sciences
University of Pretoria
Contact nr: 072 305 0000
E-mail: chantal.brey@gmail.com

Research Supervisor:

Professor Mias De Klerk
Department of Human Resource
Management
Faculty of Management Sciences
University of Pretoria
Contact nr: 011 344 0219
E-mail: miasdeklerk@gmail.com

By clicking on the link below, you indicate that:

- You have read and understand the information provided above.
- You give your consent to participate in the study on a voluntary basis.

APPENDIX D

- Research Questionnaire -

RESEARCH QUESTIONNAIRE

Questionnaire number (for office use only)												
Section A Your honest answer to each item is very important. There is no right or wrong answer in response to these items. However, for the scale to be useful, you should respond to each item in a way that best reflects your true thoughts and feelings. The five possible responses are: 1 – Never/Almost never 2 – Seldom 3 – Occasionally 4 – Frequently 5 – Constantly/Almost constantly For each item, make a cross over the one response that most accurately describes how you actually think and feel .											For office use only	
1. I experience a sense of sacredness in living things	1	2	3	4	5	A1						
2. I experience a sense of connection with other living things	1	2	3	4	5	A2						
3. I set aside time for personal reflection and growth	1	2	3	4	5	A3						
4. I value the relationship between all living things	1	2	3	4	5	A4						
5. Being truthful is important to a successful life	1	2	3	4	5	A5						
6. I find meaning in life by creating close relationships	1	2	3	4	5	A6						
7. We should give to others in need	1	2	3	4	5	A7						
8. It is important that we be sensitive to pain and suffering	1	2	3	4	5	A8						
9. I experience feelings of being whole and complete as person	1	2	3	4	5	A9						
10. It is important that each of us find meaning in our lives	1	2	3	4	5	A10						
11. All forms of life are valuable	1	2	3	4	5	A11						
12. I feel sad when I see someone else in pain	1	2	3	4	5	A12						
13. I find the world of nature boring	1	2	3	4	5	A13						
14. I listen closely when people tell me their problems	1	2	3	4	5	A14						
15. I read articles on health and inner peace	1	2	3	4	5	A15						
16. I share my private thoughts with someone else	1	2	3	4	5	A16						
17. I put the interests of others before my own when making a decision	1	2	3	4	5	A17						
18. I actively seek a sense of purpose in my life	1	2	3	4	5	A18						
19. I feel guilty when I do not tell the truth	1	2	3	4	5	A19						
20. I enjoy guiding young people	1	2	3	4	5	A20						

Section B

Your honest answer to each item is very important. There is no right or wrong answer in response to these items. However, for the scale to be useful, you should respond to each item in a way that best reflects your true thoughts and feelings. The five possible responses are:

1 – Never/Almost never | 2 – Seldom | 3 – Occasionally | 4 – Frequently | 5 – Constantly/Almost constantly

For each item, make a cross over the **one** response that most accurately describes how **you actually think and feel**.

1. In this organisation there is a sense of sacredness of life	1	2	3	4	5
2. In this organisation there is a real sense of connection with the world at large	1	2	3	4	5
3. We are urged to set aside time for personal reflection and growth in this organisation	1	2	3	4	5
4. This organisation values the relationships among everyone who works here	1	2	3	4	5
5. Being truthful is important to a successful life in this organisation	1	2	3	4	5
6. In this organisation, one can find meaning in life by creating close relationships with those working here	1	2	3	4	5
7. This organisation fosters giving to others in need	1	2	3	4	5
8. This organisation is sensitive to the pain and suffering of others	1	2	3	4	5
9. It is important to this organisation that employees are whole and complete people	1	2	3	4	5
10. The organisation encourages each of us to find meaning in our lives	1	2	3	4	5
11. In this organisation, all forms of life are valuable	1	2	3	4	5
12. There is an overall sense of sadness when someone in this organisation is in pain	1	2	3	4	5
13. The world of nature is ignored in the daily functions of this organisation	1	2	3	4	5
14. In this organisation people listen closely when others tell them about their problems	1	2	3	4	5
15. This organisation promotes health and inner peace	1	2	3	4	5
16. It is common for individuals who work here to share their private thoughts with someone else in the organisation	1	2	3	4	5
17. The organisation encourages us to put the interests of others before our own when making a decision	1	2	3	4	5
18. In this organisation, we are encouraged to actively seek a sense of purpose in our lives	1	2	3	4	5
19. In this organisation, it is expected that everyone tells the truth	1	2	3	4	5

B1	
B2	
B3	
B4	
B5	
B6	
B7	
B8	
B9	
B10	
B11	
B12	
B13	
B14	
B15	
B16	
B17	
B18	
B19	

20. We are encouraged to mentor and help new people entering the organisation	1	2	3	4	5	B20	
21. The organisation I work for cares about whether my spirit is energised by my work	1	2	3	4	5	B21	
22. I feel positive about the values of this organisation	1	2	3	4	5	B22	
23. This organisation is concerned about the poor in our community	1	2	3	4	5	B23	
24. This organisation cares about all its employees	1	2	3	4	5	B24	
25. This organisation has a conscience	1	2	3	4	5	B25	
26. I feel connected with this organisation's goals	1	2	3	4	5	B26	
27. This organisation is concerned about the health of those who work here	1	2	3	4	5	B27	
Section C Your honest answer to each item is very important. There is no right or wrong answer in response to these items. However, for the scale to be useful, you should respond to each item in a way that best reflects your true thoughts and feelings. The five possible responses are: 1 – Never/Almost never 2 – Seldom 3 – Occasionally 4 – Frequently 5 – Constantly/Almost constantly For each item, make a cross over the one response that most accurately describes how you actually think and feel .							
1. I experience a match between the requirements of my work and my values, beliefs and behaviours	1	2	3	4	5	C1	
2. At times, I experience a "high" in my work	1	2	3	4	5	C2	
3. I experience a real sense of trust and personal connection with my co-workers	1	2	3	4	5	C3	
4. I am able to find meaning or purpose at work	1	2	3	4	5	C4	
5. At times, I experience moments of complete joy and ecstasy at work	1	2	3	4	5	C5	
6. I experience a connection with a greater source of power that has a positive effect on my work	1	2	3	4	5	C6	
7. I am passionate about my work	1	2	3	4	5	C7	
8. At times, I experience an energy or vitality at work that is difficult to describe	1	2	3	4	5	C8	
9. I am fulfilling my calling through my work	1	2	3	4	5	C9	
10. My spiritual beliefs play an important role in everyday decisions that I make at work	1	2	3	4	5	C10	
11. I have a sense of personal mission in life, which my works helps me fulfil	1	2	3	4	5	C11	
12. I have moments at work in which I have no sense of time or space	1	2	3	4	5	C12	

13. I have a strong sense of purpose or meaning with my co-workers about our work	1	2	3	4	5
14. I feel grateful to be involved in work like mine	1	2	3	4	5
15. I receive inspiration from a higher power about my work	1	2	3	4	5
16. I experience moments at work where everything is blissful	1	2	3	4	5
17. I feel like I am part of a community at work	1	2	3	4	5
18. At the moment, I am right where I want to be at work	1	2	3	4	5

C13	
C14	
C15	
C16	
C17	
C18	

Section D

Your honest answer to each item is very important. There is no right or wrong answer in response to these items. However, for the scale to be useful, you should respond to each item in a way that best reflects your true thoughts and feelings. The five possible responses are:

1 – Never/Almost never | 2 – Seldom | 3 – Occasionally | 4 – Frequently | 5 – Constantly/Almost constantly

For each item, make a cross over the **one** response that most accurately describes how **you actually think and feel**.

1. At work, I feel bursting with energy	1	2	3	4	5
2. I find the work that I do full of meaning and purpose	1	2	3	4	5
3. Time flies when I am working	1	2	3	4	5
4. At my job, I feel strong and vigorous	1	2	3	4	5
5. I am enthusiastic about my job	1	2	3	4	5
6. When I am working, I forget everything else around me	1	2	3	4	5
7. My job inspires me	1	2	3	4	5
8. When I get up in the morning, I feel like going to work	1	2	3	4	5
9. I feel happy when I am working intensely	1	2	3	4	5
10. I am proud of the work that I do	1	2	3	4	5
11. I am immersed in my work	1	2	3	4	5
12. I continue working for very long periods at a time	1	2	3	4	5
13. To me, my job is challenging	1	2	3	4	5
14. I get carried away when I am working	1	2	3	4	5
15. At my job, I am very resilient mentally	1	2	3	4	5
16. It is difficult to detach myself from my job	1	2	3	4	5

D1	
D2	
D3	
D4	
D5	
D6	
D7	
D8	
D9	
D10	
D11	
D12	
D13	
D14	
D15	
D16	

17. At work I always persevere, even when things do not go well	1	2	3	4	5
-----------------------------------------------------------------	---	---	---	---	---

D17	
-----	--

Section E

Indicate (by selecting one option) your level of agreement or disagreement with each of the following statements about your organisation: **1 – Strongly disagree** | **2 – Disagree** | **3 – Neither agree nor disagree** | **4 – Agree** | **5 – Strongly agree**

1. I feel a strong sense of belonging to this organisation	1	2	3	4	5
2. I feel emotionally attached to this organisation	1	2	3	4	5
3. I am proud to tell others I work at this organisation	1	2	3	4	5
4. Working at my organisation has a great deal of personal meaning to me	1	2	3	4	5
5. I would be happy to work at my organisation until I retire	1	2	3	4	5
6. I really feel that problems faced by my organisation are also my problems	1	2	3	4	5
7. I do <i>not</i> feel like “part of the family” at my organisation	1	2	3	4	5
8. I am willing to work hard to make this organisation successful	1	2	3	4	5
9. I feel very little loyalty to this organisation	1	2	3	4	5
10. I find that my values and the organisation’s values are very similar	1	2	3	4	5
11. I really care about the fate of this organisation	1	2	3	4	5
12. Deciding to work for this organisation was a mistake	1	2	3	4	5

E1	
E2	
E3	
E4	
E5	
E6	
E7	
E8	
E9	
E10	
E11	
E12	

Section F

Indicate (by selecting one option) your level of agreement or disagreement with each of the following statements about your organisation: **1 – Strongly disagree** | **2 – Disagree** | **3 – Neither agree nor disagree** | **4 – Agree** | **5 – Strongly agree**

1. My organisation really cares about my wellbeing	1	2	3	4	5
2. My organisation strongly considers my goals and values	1	2	3	4	5
3. My organisation shows little concern for me	1	2	3	4	5
4. My organisation cares about my opinions	1	2	3	4	5
5. My organisation is willing to help me if I need a special favour					
6. Help is available from my organisation when I have a problem	1	2	3	4	5
7. My organisation would forgive an honest mistake on my part	1	2	3	4	5
8. If given the opportunity, my organisation would take advantage of me	1	2	3	4	5

F1	
F2	
F3	
F4	
F5	
F6	
F7	
F8	

9. In this organisation, good work is often recognised and rewarded	1	2	3	4	5
10. In this organisation there are opportunities for advancement	1	2	3	4	5
11. In this organisation there are opportunities to earn a high income	1	2	3	4	5
12. I am usually not told about important things that are happening in this organisation	1	2	3	4	5
13. Decisions in work are usually made without consulting the people who have to live with them	1	2	3	4	5
14. Meetings are frequently held to discuss work problems with co-workers and me	1	2	3	4	5
15. My supervisor cares about my opinions	1	2	3	4	5
16. My supervisor cares about my wellbeing	1	2	3	4	5
17. My supervisor strongly considers my goals and values	1	2	3	4	5
18. My supervisor shows very little concern for me	1	2	3	4	5

F9	
F10	
F11	
F12	
F13	
F14	
F15	
F16	
F17	
F18	

Section G

For each of the following, indicate how important or unimportant it is in your life. Would you say it is: **1 – Not important at all** | **2 – Not very important** | **3 – Neither important nor unimportant** | **4 – Rather important** | **5 – Very important**

1. Family	1	2	3	4	5
2. Friends	1	2	3	4	5
3. Religion	1	2	3	4	5
4. Work	1	2	3	4	5
5. Service to others	1	2	3	4	5
6. Relationships with co-workers	1	2	3	4	5
7. Relationships with supervisors	1	2	3	4	5
8. Relationships with subordinates (if applicable)	1	2	3	4	5

G1	
G2	
G3	
G4	
G5	
G6	
G7	
G8	

Section H

Indicate the quality of the relationships you have with each of the people listed below. Would you say it is: **1 – Very problematic (i.e. you do not get along at all)** | **2 – Somewhat problematic** | **3 – Neutral/Unsure** | **4 – Good** | **5 – Excellent (i.e. you have a unique bond with the person)**

1. Family	1	2	3	4	5
2. Friends	1	2	3	4	5

H1	
H2	

3. Co-workers	1	2	3	4	5
4. Supervisor	1	2	3	4	5
5. Subordinates (if applicable)	1	2	3	4	5

H3	
H4	
H5	

Section I

The last section of the questionnaire makes reference to biographical details, lifestyle and work related information and will be used purely for statistical purposes. *(Please note that **only** the researcher will be able to link name to your responses. Your name is needed so that the researcher can contact you, should you be selected for a follow-up interview.)* Please provide the researcher with your full name and surname, a contact telephone number and an e-mail address.

Name:

Telephone: _____

E-mail: _____

Ia	
Ib	
Ic	

Please indicate which industry you work in, by selecting the appropriate option:

I1

Banking and Finance	
Education and Training	
Government	
Health Care	
Information Technology	
Manufacturing	
Media	
Mining	
Retail	
Telecommunications	
Tourism and Hospitality	
Other	

Please indicate your position in the organisation by selecting the appropriate option:

I2

Top Management	
Middle Level Management/Head of Department or Section	
Lower Level Manager/Team Leader	
Entry Level/Junior Employee	
Independent Contractor	
Administrative	

Other

Please indicate your gender by selecting the appropriate option

Male

Female

I3

Please indicate your ethnic group by selecting the appropriate option

Black /African

White

Coloured

Indian

Asian

Other

I4

Please indicate your age by selecting the appropriate option

18-29 years

30-39 years

40-49 years

50-59 years

60 + years

I5

Please indicate your marital status by selecting the appropriate option

Single

Married

Unmarried but co-habiting with a partner

Separated

Divorced

Widowed

I6

Please indicate your highest level of education by selecting the appropriate option

Grade 10-11/Standard 8-9

Grade 12/Standard 10 or equivalent

Post-school certificate/diploma

National diploma/National higher diploma

Bachelor's degree or equivalent

Honour's degree or equivalent

Master's degree or equivalent

Doctoral degree or equivalent

I7

How long have you been working for your current employer/organisation?

Indicate your term of employment by selecting the appropriate option

Less than one year	
1-2 years	
3-5 years	
6-10 years	
10-15 years	
16-20 years	
21-25 years	
26-30 years	
More than 30 years	

Did you make any substantial career changes in your working life?

Yes	
No	

If you answered yes to the previous question, please indicate if this career change affected your perspective on the following (select the options that apply to you)

Work	
Life	
Meaning	

Indicate the level of satisfaction with your career progression to date by selecting the option that applies to you

Completely dissatisfied	
Dissatisfied	
Neutral	
Satisfied	
Very satisfied	

Indicate your level of happiness at work by selecting the option that applies to you

Very unhappy	
Unhappy	
Neither happy nor unhappy	
Happy	
Very happy	

Would you continue working if you won the lottery (say R20 million)?

Yes	
No	

I8	

I9a	

I9b	

I10	

I11	

I12	

Would you continue with your present job if you won the lottery?

Yes	
No	

I13	

Please indicate your religious orientation by selecting the option that applies to you

Christian	
Jewish	
Islamic/Muslim	
African traditional	
Hindu	
Buddhist	
Sikh	
Atheist	
Pantheist	
Agnostic	
Other	

I14	

Please indicate the strength of your religious conviction by selecting the option that applies to you

Very weak	
Weak	
Moderate	
Strong	
Very strong	

I15	

Thank you! The survey is now complete. Thank you for your time and effort in completing the questionnaire. Should you wish to receive feedback on the results of the study, please select the appropriate option below

Yes

No

APPENDIX E

- Invitation e-mail for participation in follow-up interview -

Dear

I trust you are well? Earlier this year you agreed to participate in my PhD study on meaningful work and completed an online survey where you provided me with your contact details and indicated your willingness to participate in a follow-up interview. Thank you so much for completing the online survey and for providing me with such valuable insights. I would like to schedule a 45 minute follow-up interview with you to gain a better understanding of your experiences in life and work and want to find out about your availability over the next three to four weeks.

I would like to record the interview to ensure accuracy of data. However, I want to reassure you that **your responses will be kept confidential** and your identity will **not** be disclosed in any way. I will simply be reporting on an aggregate of your responses to my questions compared to those of other interviewees.

Please let me know if there is a day and time over the next three to four weeks that would suit you?

Looking forward to hearing from you.

Kind regards

Chantal Breytenbach

Cell: 072 305 0000

Home: 011 792 6134

E-mail: chantal.brey@gmail.com

APPENDIX F

- Semi-Structured Interview Questions -

IS+	OS+	SAW+
1) What gives you personal meaning? [Awareness of life/Meaning] 2) How/Why do you experience a connection to others? [Larger context] 3) What does compassion mean to you? How do you express compassion in your daily life? [Compassion]	1) How does your organisation contribute to a greater purpose? [Awareness of life/Meaning] 2) How does your organisation ensure connection and collaboration among staff in the organisation? [Larger context] 3) How do you see compassion being expressed in and by your organisation? [Compassion]	1) Describe what needs to happen for you to feel absorbed and invigorated by your work? / Describe when and how you feel most absorbed and invigorated by your work? [Engaging work] 2) Describe a time when you felt most alive and energised at work. [Mystical experience] 3) Describe how and in what way your personal or spiritual beliefs play out in your actions and decisions at work? [Spiritual connection] 4) Describe your relationships with your co-workers [Sense of community]
IS-	OS-	SAW-
1) What would you need to experience more personal meaning? / Why are you currently not experiencing personal meaning? [Awareness of life/Meaning] 2) Why do you think you are not experiencing a connection to others? [Larger context] 3) What does compassion mean to you? [Compassion]	1) What would need to change in your organisation for it to be contributing to a greater purpose or for the working environment to become more meaningful? [Awareness of life/Meaning] 2) How could your organisation encourage more connection and collaboration in the working environment? [Larger context] 3) What would need to change in your organisation for you to perceive it as a compassionate/caring employer? [Compassion]	1) What would need to change for you to feel absorbed and invigorated by your work? [Engaging work] 2) What would need to change for you to feel alive and energised at work or to experience joy and ecstasy at work? [Mystical experience] 3) Describe what would need to change in your organisation for you to feel that you are allowed to express your individuality or personal beliefs in the work environment? [Spiritual connection] 4) What would need to change in your organisation for you to experience better working relationships with your co-workers? [Sense of community]

APPENDIX G

- List of demographic variables for ANOVA -

Moderating variable	ID	Notes	Grouping according to data frequency table
Organisational support	"My organisation really cares about my wellbeing" [F1]	Consists of 7 items, but one item selected for ANOVA	5-point Likert scale - thus 5 groups
Organisational rewards	"In this organisation good work is recognised and rewarded" [F9]	Consists of 3 items. 2 are useful for ANOVA	5-point Likert scale - thus 5 groups
	"In this organisation there are opportunities for advancement" [F10]		5-point Likert scale - thus 5 groups
Procedural Justice	"I am usually not told about important things that are happening in this organisation" [F12 - Reverse coded]	Consists of 3 items. 2 are useful for ANOVA	5-point Likert scale - thus 5 groups
	"Decisions in work are usually made without consulting the people who have to live with them" [F13 - Reverse coded]		5-point Likert scale - thus 5 groups
Supervisor support	"My supervisor cares about my wellbeing" [F16]	Consists of 4 items. To maintain consistency with organisational support, use 1 item for ANOVA	5-point Likert scale - thus 5 groups
Gender	[I3]	2 groupings - male and female	2 groupings: Male [1] - 509 respondents; and Female [2] - 258 respondents

Moderating variable	ID	Notes	Grouping according to data frequency table
Ethnicity	[I4]	6 original groupings reduced to 2 groups - white and non-white <i>*Note that 7 respondents did not indicate ethnicity</i>	White [1] - 653 respondents; and Non-white [2] - 108 respondents
Age	[I5]	5 original groupings reduced to 4 groups <i>*Note that 2 respondents did not indicate age</i>	Combine 18-29 and 30-39 grouping into one grouping. Thus 4 groups: [1] 18-39 - 134 respondents; [2] 40-49 - 207 respondents; [3] 50-59 - 259 respondents; [4] 60+ - 166 respondents.
Highest Qualification	[I7]	8 original groupings reduced to 3 groups	Combine Gr 11 + Gr 12 + Post-school Certificate into one group; National Diploma & Bachelors degree into one group; Honours, Master's and Doctoral into one group. Thus 3 groups: [1] Secondary Schooling - 183 respondents; [2] Diploma/Degree - 250 respondents; [3] Post-Graduate - 333 respondents
Substantial Career Change	[I9a]	2 groupings - yes and no	2 Groupings: [1] Yes - 487 respondents; [2] No - 279 respondents
Impact of Career Change	[I9b]	3 multi-choice groupings - work, life and meaning	3 Groupings: [1] Work - 369 respondents; [2] Life - 350 respondents; [3] Meaning - 245 respondents

Moderating variable	ID	Notes	Grouping according to data frequency table
Career Satisfaction	[I10]	5-point Likert scale <i>*Note that 2 respondents did not indicate career satisfaction</i>	5-point Likert scale - thus 5 groups
Happiness at work	[I11]	5-point Likert scale <i>*Note that 2 respondents did not indicate happiness at work</i>	5-point Likert scale - thus 5 groups
Religious Orientation	[I14]	11 original groupings reduced to 3 groups <i>*Note that 2 respondents did not indicate religious orientation</i>	Christian stands alone as largest group. Combine all other religions, except for Atheist, Pantheist and Agnostic which becomes another group on its own. Thus 3 groups: [1] Christians - 549 respondents; [2] Other religions - 112 respondents; [3] Atheists, Pantheists and Agnostics - 105 respondents
Strenght of Religious Conviction	[I15]	5-point Likert scale <i>*Note that 2 respondents did not indicate strength of religious conviction</i>	5-point Likert scale - thus 5 groups

APPENDIX H

- NVivo Complete Code Book for Qualitative Data Analysis -

Spirituality Code Book

Name	Description	Hierarchical Name	Number of Sources Coded
A negative employee affects the bottom line	A negative employee affects the bottom line and spreads their negativity to everyone else. It is important for each employee in the organisation to pull their weight in the team.	Nodes\\A negative employee affects the bottom line	1
All religions espouse the same message	Underneath it all, all religions espouse the same underlying message. Most religions come down to one core message.	Nodes\\All religions espouse the same message	4
Allow for flexibility in work	The company recognises that people have lives outside of work and thus allows for flexibility at work or in work.	Nodes\\Allow for flexibility in work	6
Allow the team to flourish and grow	The team is encouraged to collaborate, to flourish and to grow. There is a strong focus on team development.	Nodes\\Allow the team to flourish and grow	8
Ask for input from staff	The management of the organisation ask for input from staff before they make critical	Nodes\\Ask for input from staff	7
Be authentic with others to connect with them	Be yourself and be authentic with others in order to connect with them.	Nodes\\Be authentic with others to connect with them	5
Be loyal to staff and they will be loyal to you	Demonstrate loyalty, care and compassion to staff and they will also be loyal and committed to you. If you care about your people, they will do anything to give back to the organisation.	Nodes\\Be loyal to staff and they will be loyal to you	4
Believe the best about employees	Believe the best about employees, even when they let you down. Give them the benefit of the doubt.	Nodes\\Believe the best about employees	3
Camaraderie and friendship in the work	There is a sense of camaraderie and people are friends in the work environment.	Nodes\\Camaraderie and friendship in the work	7
Choose your staff carefully	Choose your staff carefully. Select people with the right attitudes that will fit the organisational culture.	Nodes\\Choose your staff carefully	2
Collaboration is about customer satisfaction	Collaboration should only be for the sake of customer satisfaction.	Nodes\\Collaboration is about customer satisfaction	1
Collaboration is based on a shared purpose	Create a common or shared purpose among staff in the organisation to ensure greater connection and collaboration.	Nodes\\Collaboration is based on a shared purpose	6
Collaborative decision-making for the greater whole	The organisation encourages collaborative decision-making for the greater whole or the greater good - decisions that will benefit the majority or everyone in the organisation.	Nodes\\Collaborative decision-making for the greater whole	6
Communicate in a respectful way	Management should communicate in a respectful way. They should treat people with dignity and respect and they should not belittle or degrade people.	Nodes\\Communicate in a respectful way	1
Compassion and understanding for the	There is a lot of compassion and understanding for the individual in the organisation.	Nodes\\Compassion and understanding for the	11

Name	Description	Hierarchical Name	Number of Sources Coded
Compassion is about being honest	Compassion is about being honest with someone when they are being the author of their own demise. It is about offering honest help.	Nodes\\Compassion is about being honest	3
Compassion is about respect	Compassion is respecting another person, their needs and their wants or where they come from	Nodes\\Compassion is about respect	9
Compassion is about understanding	Compassion is about understanding another person's situation or circumstances; about recognising their challenges and really understanding what they are going through.	Nodes\\Compassion is about understanding	10
Compassion is an investment in someone	Compassion is recognising potential and investing in that potential. It is about encouraging the personal development of another person.	Nodes\\Compassion is an investment in someone	2
Compassion is showing mercy	Compassion is about showing mercy to another person.	Nodes\\Compassion is showing mercy	1
Compassion is unconditional care	Compassion is caring without expecting anything back.	Nodes\\Compassion is unconditional care	1
Conflict is seen as a good thing	Conflict is considered positive as an opportunity to learn from our mistakes and do things better.	Nodes\\Conflict is seen as a good thing	1
Connection is about communication	Connection is about open, clear and transparent communication with others to understand them better.	Nodes\\Connection is about communication	2
Connection is about empathy	Connection with others is based on empathy for their situations and their circumstances or their personal challenges.	Nodes\\Connection is about empathy	4
Connection is about head and heart	You have to think with the head and feel with the heart; understand the person and their needs but also have compassion for their feelings and needs.	Nodes\\Connection is about head and heart	2
Connection is about trust	Connection is about trust. It requires trust to feel connected to someone.	Nodes\\Connection is about trust	2
Connection is about understanding	Connection is about understanding another person, their needs, their wants and their situation. It's about understanding the dynamics at play.	Nodes\\Connection is about understanding	6
Corporate greed erodes spirituality in the workplace	Corporate greed erodes spirituality in the work place. Often organisations are only focused on the bottom line and on making money or increasing profits with no concern for the wellbeing of employees.	Nodes\\Corporate greed erodes spirituality in the workplace	4
Corporates are toxic	Some corporate environments are toxic or not human friendly. They are 'snake-pits' that rob people of their spirit.	Nodes\\Corporates are toxic	4
Create a comfortable work environment	The company attempts to make the work environment comfortable for staff	Nodes\\Create a comfortable work environment	11
Create a happy organisational culture	The company believes that happy staff are productive staff so they emphasise an organisational culture of happiness	Nodes\\Create a happy organisational culture	7
Creating something new gives me meaning	I am a creative person, so creating something new, gives me meaning and purpose.	Nodes\\Creating something new gives me meaning	2

Name	Description	Hierarchical Name	Number of Sources Coded
CSI is not the goal. The company should not be expected to do more.	CSI is not the aim. The aim is to make profit and to create jobs and grow the economy. The company should not be expected to do more than that.	Nodes\\CSI is not the goal. The company should not be expected to do more.	4
Dictatorial leadership style	My leadership is dictatorial. I am the captain of the ship.	Nodes\\Dictatorial leadership style	1
Difference between religion and spirituality	There is a difference between religion and spirituality. They are not the same thing. You can be spiritual without being religious.	Nodes\\Difference between religion and spirituality	3
Do not allow cowards to lead	Do not allow weak managers or appeasers to lead. They are cowards. You have to have the courage and the nerve to say things exactly how they are.	Nodes\\Do not allow cowards to lead	1
Do not judge others	Do not judge others if you do not understand their situations.	Nodes\\Do not judge others	3
Emphasise service in everything we do	The company emphasises service in everything they do. Service is a core value of the business.	Nodes\\Emphasise service in everything we do	2
Employees are not robots	Employees are not robots. They cannot function like machines or drones. They need to be respected as individuals.	Nodes\\Employees are not robots	1
Fake compassion	Fake compassion is politically correct compassion and it does not make much of a difference to anyone, because it is not real.	Nodes\\Fake compassion	1
Family gives me personal meaning	Individuals indicate that their families are important to them and give them personal meaning.	Nodes\\Family gives me personal meaning	9
Family is important	Individuals indicate that their families are important to them or that they prioritise or value their families over other aspects of their lives.	Nodes\\Family is important	7
Find common ground for connection	It is important to find common ground in order to establish connection. Find out what you have in common or what common ground you have with another person.	Nodes\\Find common ground for connection	7
Flat organisational structures are needed	Flat organisational structures with less bureaucracy are needed to ensure effective collaboration.	Nodes\\Flat organisational structures are needed	7
Get involved with staff and show you care	It is important for managers to get involved with their staff and to demonstrate care and compassion for their people.	Nodes\\Get involved with staff and show you care	9
Get out of your comfort zone	You have to get out of your comfort zone to understand the challenges of others and to truly understand what people are going through.	Nodes\\Get out of your comfort zone	2
Get staff involved in CSI initiatives	The company contributes to CSI initiatives and encourages staff to get involved directly	Nodes\\Get staff involved in CSI initiatives	4
Goals are filtered down to all levels of the organisation	Management ensures that goals and strategies are focused down to all levels of the organisation so that everyone works towards a shared purpose.	Nodes\\Goals are filtered down to all levels of the organisation	6
Highly qualified and well-trained staff	Staff are highly qualified and well trained. Management invests in training staff properly.	Nodes\\Highly qualified and well-trained staff	3

Name	Description	Hierarchical Name	Number of Sources Coded
Hold employees accountable for their output	Hold employees accountable for they output they deliver. Trust that they can and will deliver and let them take responsibility for their own output.	Nodes\\Hold employees accountable for their output	4
I am energised by finding solutions to	Work is about finding solutions. That is what energises me.	Nodes\\I am energised by finding solutions to problems	3
I am no longer passionate and excited	I am no longer passionate and excited about a cause. I do not have the energy. I am too old	Nodes\\I am no longer passionate and excited	2
I am not an emotional person	Expressed by participants who do not view themselves as emotional and compassionate or caring.	Nodes\\I am not an emotional person	3
I am not religious	The individual indicates that they are not	Nodes\\I am not religious	7
I am religious	I am religious - indication from religious participants about their religious views.	Nodes\\I am religious	6
I can do my work anywhere. I don't need to be here.	I can do my work anywhere. I don't have to be part of this particular organisation. I could literally go anywhere else. My work is meaningful because of the work I do and not because of the company I work for.	Nodes\\I can do my work anywhere. I don't need to be here.	1
I create my own life purpose without the organisation	In all honesty, I create my own life purpose without the organisation making any significant contribution to my life or my purpose in life.	Nodes\\I create my own life purpose without the organisation	1
I do not want to sacrifice quality time with my family for work	I do not want to be working all the time. I do not want to sacrifice quality time with my family for work.	Nodes\\I do not want to sacrifice quality time with my family for work	1
I enjoy the challenge	Individuals express that they enjoy the challenge or that they seek challenging work.	Nodes\\I enjoy the challenge	8
I feel excited about work on most days	I feel energised and excited about work on most days.	Nodes\\I feel excited about work on most days	3
I love what I do	Individuals who express that they love their work; love what they do or actually enjoy	Nodes\\I love what I do	5
I practice spirituality without religion	Individuals who indicate that they practice spirituality or have spiritual experiences but that these do not occur in a religious context but rather happen outside the context of religion.	Nodes\\I practice spirituality without religion	5
I trust the people I work with	Team members expressing that they trust the people they work with and that they have trusting relationships with their co-workers.	Nodes\\I trust the people I work with	6
I want to add value	Individuals express the need to add value and to make a difference to their environment or society to those around them.	Nodes\\I want to add value	6
Improve working conditions of people	It is the company's goal to improve the working conditions of people or to create better work environments.	Nodes\\Improve working conditions of people	6
In large corporates sub-cultures will form	In large organisations, sub-cultures will form where people do their own thing and disconnects from the larger organisation and its purpose.	Nodes\\In large corporates sub-cultures will form	2

Name	Description	Hierarchical Name	Number of Sources Coded
Inform employees of the company's situation	The company keeps staff informed of the company's situation and performance. Informed staff can take initiatives to drive company performance.	Nodes\\Inform employees of the company's situation	7
It is not about money	The focus is not just on making money. It is about fulfilling a purpose, or making a difference or getting the team to work together.	Nodes\\It is not about money	5
Leaders must set the example	Leaders must set the example of how they would like their staff to behave and treat others in the organisation as well as the standard of work that they want employees to strive for.	Nodes\\Leaders must set the example	4
Live in a non-impactful way	It is important to live in a non-impactful way - to not cause harm to others or the environment.	Nodes\\Live in a non-impactful way	1
Live with passion	A respondent indicates that life itself gives him personal meaning and that he is passionate about life.	Nodes\\Live with passion	2
Look after the whole person	Organisations should look after the whole person if they want to increase motivation and productivity.	Nodes\\Look after the whole person	4
Love is the most important value	Love is the most important universal value. People should live a life of love.	Nodes\\Love is the most important value	4
Maintain a professional relationship	Staff maintain a professional relationship. They are not friends and they do not socialise together, but they respect each other.	Nodes\\Maintain a professional relationship	6
Maintain high standards of excellence	There is a focus on excellence and high quality or standards. Staff are encouraged to focus on excellence and to deliver products and services of a high quality or standard.	Nodes\\Maintain high standards of excellence	2
Make people feel part of the family	Organisations have to try and make their employees feel part of the family.	Nodes\\Make people feel part of the family	3
Making a contribution	Personal meaning is derived from contributing to something bigger than themselves	Nodes\\Making a contribution	8
Making a difference	It is rewarding and satisfying to be making a difference. There is a big need to make a difference. People want to feel like they are making a difference.	Nodes\\Making a difference	10
Management expects too much	Management expects too much from their staff and are driving people too hard. They have unreasonable expectations.	Nodes\\Management expects too much	1
Morals do not come from religion	You do not have to be religious to be moral or ethical or to know the difference between right and wrong.	Nodes\\Morals do not come from religion	3
My boss is incompetent	My boss is incompetent and has unrealistic expectations.	Nodes\\My boss is incompetent	1
My religion is not conscious. Rather my values are.	My religion is not conscious. I don't think about it every day, but the underlying values are there and the underlying values drive my behaviour.	Nodes\\My religion is not conscious. Rather my values are.	2

Name	Description	Hierarchical Name	Number of Sources Coded
Offer support and encouragement to staff	Offer support and encouragement to staff to help them learn, grow and perform.	Nodes\\Offer support and encouragement to staff	7
Only a small part of my work is exciting	I spend approximately 20% of my time on work that I like doing and 80% of my time on work that I don't enjoy. Only a small part of my work is exciting.	Nodes\\Only a small part of my work is exciting	1
Open, clear and transparent communication	The organisations encourage and ensures open, clear and transparent communication among staff on all levels.	Nodes\\Open, clear and transparent communication	9
Opportunities for growth and development	Individuals seek opportunities for growth and development from their work. They want to continually learn and grow and they seek challenging and rewarding work.	Nodes\\Opportunities for growth and development	7
Pay people fairly	In order to create a spiritual work environment, people should be rewarded for their work and should be paid fairly.	Nodes\\Pay people fairly	4
People are allowed to disagree	The staff in the organisation are allowed to disagree and to say so openly.	Nodes\\People are allowed to disagree	6
People give of their time	The organisation contributes to a greater purpose by giving of their time to charitable	Nodes\\People give of their time	5
Personal meaning is about making a difference	Individuals derive personal meaning from making a difference to others, or society or the world.	Nodes\\Personal meaning is about making a difference	7
Positive feedback makes me feel energised in work	Positive feedback makes me feel energised in my work. I need the feedback to know how I am doing and where I am going.	Nodes\\Positive feedback makes me feel energised in work	1
Practical CSI initiatives	Examples of practical CSI initiatives the organisation partakes in	Nodes\\Practical CSI initiatives	5
Practical examples of compassion	Practical examples of how individuals demonstrate compassion in their own lives.	Nodes\\Practical examples of compassion	10
Provide feedback to staff	Provide feedback on performance. Provide positive feedback for a job well done.	Nodes\\Provide feedback to staff	8
Quality time is necessary for connection	Connection requires that one spends quality time with someone and get to know them.	Nodes\\Quality time is necessary for connection	3
Recognise people have lives outside of work	Recognise that people have lives outside of work	Nodes\\Recognise people have lives outside of work	7
Recognition for good	Recognition for a job well done goes a long way.	Nodes\\Recognition for good	10
Relationships are important	Our relationships with ourselves and our families or significant others are important. Relationships contribute to personal meaning.	Nodes\\Relationships are important	2
Religion encourages hypocrisy	Often religious people adhere to dogma, but they are hypocrites. They preach to others, without truly living the values that they espouse.	Nodes\\Religion encourages hypocrisy	3
Religion is often followed out of tradition	Individuals who describe following particular practices and rituals purely out of tradition rather than anything else. Their religion is tied to tradition or ritual and not to actual belief.	Nodes\\Religion is often followed out of tradition	6
Religion is too dogmatic	Religion is too dogmatic and ritualistic. It requires conformism and is too restrictive as a	Nodes\\Religion is too dogmatic	5

Name	Description	Hierarchical Name	Number of Sources Coded
Religion plays a big role in my life	Religious participants indicated that their religion plays a big role in their lives.	Nodes\\Religion plays a big role in my life	5
Respect for the individual	The company respects the individual and recognises that each person is different and that all people are human beings	Nodes\\Respect for the individual	10
Reward employees when the company does well	Employees are rewarded when the company performs well due to everyone's combined efforts.	Nodes\\Reward employees when the company does well	9
Sense of achievement	The desire to achieve or accomplish something in order to derive personal meaning in their work	Nodes\\Sense of achievement	9
Sense of family in the organisation	There is a family-feel or a sense of family to the relationships in the organisation.	Nodes\\Sense of family in the organisation	5
Sense of pride in the team	The team takes pride in their work or in being part of the organisation.	Nodes\\Sense of pride in the team	10
Set clear and specific goals to ensure collaboration	Management needs to set clear and specific goals to ensure collaboration among staff in the organisation.	Nodes\\Set clear and specific goals to ensure collaboration	7
Share information with staff	The company discloses and shares information with staff to keep them informed.	Nodes\\Share information with staff	9
Sharing common values for connection to be	You have to share common values or beliefs in order to connect effectively with another person.	Nodes\\Sharing common values for connection to be	5
Show employees that you are giving back	Companies that seek greater commitment from their employees should show their employees that they are giving back to their communities and to society in general.	Nodes\\Show employees that you are giving back	3
Show people that you care	Individuals demonstrate passion by showing people that they actually care.	Nodes\\Show people that you care	8
Special connection with friends	Having a special connection with friends. Friends are your selected family	Nodes\\Special connection with friends	3
Spend time with someone and listen to	It is necessary to spend time with someone and listen to them in order to feel connected to them.	Nodes\\Spend time with someone and listen to them	5
Spirituality is about a universal consciousness	There is a universal consciousness that spreads across every living thing and that connects all living things. This is the higher power or force that religions talk about.	Nodes\\Spirituality is about a universal consciousness	1
Spirituality is about respect and understanding	Spirituality is about respect and understanding. It is about respecting the individual and understanding each person's unique situation.	Nodes\\Spirituality is about respect and understanding	3
Spirituality is connecting with nature	Spirituality can be experienced by going out in nature and connecting with nature.	Nodes\\Spirituality is connecting with nature	2
Spread positive energy to the team	Staff members who are positive about their work and their work environments want to spread the positivity to their team members.	Nodes\\Spread positive energy to the team	2
Staff development	There are staff development initiatives for both individuals and teams.	Nodes\\Staff development	4
Staff meet regularly	There are regular staff interactions and meetings to encourage connection and collaboration.	Nodes\\Staff meet regularly	5

Name	Description	Hierarchical Name	Number of Sources Coded
Staff turnover is low	Some respondents indicated that their staff turnover was low to illustrate that they have positive work environments and good effective connection and collaboration.	Nodes\\Staff turnover is low	2
Stay away from negative people	Stay away from negative people. They contaminate your thoughts and create negative energy. It is better to cut them out of your life.	Nodes\\Stay away from negative people	1
Success starts at home	No success compensates for failure at home. It starts at home.	Nodes\\Success starts at home	1
Team work and collaboration	The company encourages team work and collaboration as well as team integration. People are encouraged to work together in teams.	Nodes\\Team work and collaboration	11
The goal was to make money	The company's main goal was to make money; to ensure that the business is profitable.	Nodes\\The goal was to make money	7
The organisation does not contribute to a greater purpose	The organisation does not contribute to a greater purpose. They do not contribute to society or the larger community.	Nodes\\The organisation does not contribute to a greater purpose	5
The organisation is not transparent	The organisation is not transparent. They do not inform staff of critical decisions. They do not involve staff or share information. They are not open and honest.	Nodes\\The organisation is not transparent	2
The organisation is selfish and arrogant	The management of this organisation is selfish and arrogant. They don't care about people.	Nodes\\The organisation is selfish and arrogant	1
The organisation is transparent	The organisation is transparent. They share information with staff.	Nodes\\The organisation is transparent	4
The size of the organisation matters	The size of the organisation matters. It is easier to create a spiritual work environment in a small to medium-sized organisation that it is to do so in a large corporate environment.	Nodes\\The size of the organisation matters	7
There are not enough resources	There is not enough manpower and resources to get the work done.	Nodes\\There are not enough resources	1
There are universal values	There are certain universal values that every human being inherently understands regardless of their religious or cultural background.	Nodes\\There are universal values	2
There is a lack of transparency	There is no transparency. Decisions are made without considering staff.	Nodes\\There is a lack of transparency	2
There is no communication in the organisation	There is no communication in the organisation. Management does not communicate clearly with staff. There is no clarity or transparency.	Nodes\\There is no communication in the organisation	1
There is no connection in the organisation	There is no connection in the organisation. There is a big gap between management and	Nodes\\There is no connection in the organisation	1
There is too much control in corporates	There is too much micromanagement and control in corporate work environments. People should be provided with more flexibility.	Nodes\\There is too much control in corporates	3
Tightly integrated team that work closely together	The team is tightly integrated and they work closely together. There is sharing of information and collaboration and cooperation.	Nodes\\Tightly integrated team that work closely together	8

Name	Description	Hierarchical Name	Number of Sources Coded
Tolerate employee mistakes	It is important to tolerate employee mistakes; to allow people to make mistakes and to learn from those mistakes.	Nodes\\Tolerate employee mistakes	2
Treat employees fairly	Treat employees fairly and apply the same rules and policies to everyone.	Nodes\\Treat employees fairly	3
Treat everyone the same	Treat everyone the same irrespective of their background, their culture, the race or gender or social economic status.	Nodes\\Treat everyone the same	7
Trust that staff are capable and can do their work	It is important to trust that staff are competent and capable and that they can do their work effectively.	Nodes\\Trust that staff are capable and can do their work	6
Understanding another person	Understanding another person and their needs and wants. Understanding who they are as a person.	Nodes\\Understanding another person	9
Values - Authenticity	A core value is authenticity. It is about being open and honest about who you are and being genuine in your interaction with others. Being real.	Nodes\\Values - Authenticity	1
Values - Compassion	A core value is compassion. Caring about and understanding of another person.	Nodes\\Values - Compassion	1
Values - Do not steal	It is important not to steal from the company.	Nodes\\Values - Do not steal	1
Values - Do the right thing	It is important to do the right thing; to act correctly in the situation.	Nodes\\Values - Do the right thing	2
Values - Excellence	A core value is excellence. It is important to strive for excellence in everything we do.	Nodes\\Values - Excellence	2
Values - Honesty	A core value for most participants is honesty.	Nodes\\Values - Honesty	7
Values - Integrity	A core value is integrity - to ensure that your actions reflect your words and that you do what you say you will do and always keep your word.	Nodes\\Values - Integrity	8
Values - Kindness	A core value is kindness - demonstrating kindness towards others.	Nodes\\Values - Kindness	1
Values - Passion	It is important to live with passion; to be passionate about what you do and how you do it.	Nodes\\Values - Passion	1
Values - Professionalism	A core value is professionalism. It is important to remain professional and to strive for quality.	Nodes\\Values - Professionalism	2
Values - Respect	One of the core values is respect - respect for oneself, respect for others, respect for employees and co-workers, respect for customers/clients.	Nodes\\Values - Respect	2
Values - The Golden Rule and being a good person	An important value is being a good person and treating others how you would like them to treat you.	Nodes\\Values - The Golden Rule and being a good person	3
Values - Transparency	A core value is absolute transparency; being open about who you are and what you stand for and what you do.	Nodes\\Values - Transparency	2
Values - Trust	A critical value is trust. It is important to be trustworthy and to create trust.	Nodes\\Values - Trust	4
Values - Trustworthiness	A core value is trustworthiness. It is important to be trustworthy and to display honesty and integrity.	Nodes\\Values - Trustworthiness	2

Name	Description	Hierarchical Name	Number of Sources Coded
We adhere to policies	The organisation adheres to policies and ensures that they comply with all the rules.	Nodes\\We adhere to policies	3
We are all interconnected	We are all interconnected on some level - be that on the molecular, spiritual or emotional level	Nodes\\We are all interconnected	2
We have good relationships	The people in the organisation report having good relationships with each other.	Nodes\\We have good relationships	9
Work gives me personal meaning	Some participants indicate that their work contributes to their personal meaning or that they derive meaning from their work.	Nodes\\Work gives me personal meaning	9
Work must be a safe place	Create a safe space for employees to work in. Work must be a safe space.	Nodes\\Work must be a safe place	2