

## **ABBREVIATIONS**

ADHD – Attention Deficit Hyperactive Disorder

ASEBA – Achenbach System of Empirically Based Assessment

SPSS – Statistical Package for Social Sciences

WHO – World Health Organisation

YSR – Youth Self-Report

## TABLE OF CONTENTS

Declaration .....	i
Acknowledgements .....	ii
Abbreviations .....	iv
Table of Contents .....	v
List of Appendices .....	ix
List of Tables .....	x
List of Figures.....	xi
Summary .....	xii

## CHAPTER ONE: ORIENTATION AND BACKGROUND

1.1	INTRODUCTION .....	1
1.1.1	Background of the study .....	2
1.1.2	Awareness of problem .....	4
1.2	PROBLEM STATEMENT .....	7
1.3	PURPOSE OF THE STUDY .....	8
1.3.1	Research questions and hypotheses.....	9
1.4	RESEARCH DESIGN AND METHODS .....	9
1.5	ETHICAL CONSIDERATIONS .....	11
1.6	SIGNIFICANCE OF THE STUDY .....	11
1.7	DELIMITATIONS .....	13
1.8	OPERATIONAL DEFINITION OF TERMS .....	14
1.8.1	Adolescents .....	14
1.8.2	Secondary school .....	14
1.8.3	Emotional and behavioural problems .....	15
1.8.4	Internalising problems .....	15
1.8.5	Externalising problems .....	15
1.8.6	Pitfalls of emotional and behavioural problems .....	16
1.9	CONCLUSION .....	16

1.10	CHAPTER OUTLINE .....	17
------	-----------------------	----

## **CHAPTER TWO: THEORETICAL AND CONCEPTUAL FRAMEWORK**

2.1	INTRODUCTION .....	19
2.2	THEORIES OF EMOTIONAL AND BEHAVIOURAL PROBLEMS .....	19
2.2.1	Ecological factors theory .....	20
2.2.1.1	<i>Family related factors.</i> .....	21
2.2.1.2	<i>School related factors.</i> .....	22
2.2.1.3	<i>The social context.</i> .....	23
2.2.2	Biological factors theory of human development .....	23
2.2.3	Bio-ecological model of human development .....	25
2.3	A SUMMARY OF THE MODEL OF CONCEPTUAL FRAMEWORK.....	28
2.4	SUMMARY .....	32

## **CHAPTER THREE: REVIEW OF RELATED LITERATURE**

3.1	INTRODUCTION .....	34
3.2	OVERVIEW .....	34
3.3	ASPECTS OF DEVELOPMENT.....	35
3.3.1	Physical development .....	35
3.3.2	Cognitive development .....	37
3.3.3	Psychosocial development.....	38
3.3.4	Moral development.....	39
3.4	PREVALENCE OF EMOTIONAL AND BEHAVIOURAL PROBLEMS OF SCHOOL ADOLESCENTS.....	40
3.5	TYPES OF EMOTIONAL AND BEHAVIOURAL PROBLEMS.....	41
3.5.1	Anxiety/depression .....	42
3.5.2	Social withdrawal/rejection .....	43
3.5.3	Aggression/bullying behaviours.....	46
3.5.4	Attention Deficit Hyperactivity Disorder (ADHD) .....	47

3.5.5	Academic problems .....	47
3.5.6	Somatic disorder.....	49
3.5.7	Oppositional defiant behaviours .....	50
3.5.8	Conduct disorder and rule breaking behaviours .....	51
3.5.9	Internalising and externalising behavioural problems .....	52
3.5.9.1	<i>Internalising behavioural problems</i> .....	52
3.5.9.2	<i>Externalising behavioural problems</i> .....	53
3.6	CONCLUSION .....	53

## **CHAPTER FOUR: RESEARCH DESIGN AND METHODOLOGY**

4.1	INTRODUCTION .....	55
4.2	RESEARCH PROBLEM .....	55
4.3	RESEARCH DESIGN AND METHODS .....	57
4.3.1	Instrumentation and data collection .....	58
4.3.1.1	<i>Questionnaire</i> .....	60
4.3.2	Population and sampling .....	64
4.3.3	Pilot test.....	68
4.3.4	Validity and reliability .....	68
4.3.5	Method of data analysis .....	69
4.4	ETHICAL CONSIDERATIONS .....	70
4.5	CONCLUSION .....	71

## **CHAPTER FIVE: DATA PRESENTATION AND ANALYSES**

5.1	INTRODUCTION .....	72
5.2	DATA PRESENTATION .....	73
5.2.1	Demographic characteristics of the respondents.....	74
5.2.2	Social competence/adaptive functioning and syndrome/problems scales .....	76
5.2.2.1	<i>Research Question 1</i> .....	78
5.2.2.2	<i>Research Hypothesis 1</i> .....	79

5.2.2.3	<i>Research Question 2</i> .....	81
5.2.2.4	<i>Research Hypothesis 2</i> .....	82
5.2.2.5	<i>Research Hypothesis 3</i> .....	84
5.2.2.6	<i>Research Hypothesis 4</i> .....	86
5.3	CONCLUSION .....	87

## **CHAPTER SIX: SUMMARY, FINDINGS, RECOMMENDATIONS AND CONCLUSION**

6.1	INTRODUCTION .....	88
6.2	SUMMARY .....	89
6.3	FINDINGS .....	91
6.3.1	Experience of social competence problems of secondary school	
6.3.2	adolescents .....	91
6.3.3	Correlational relationship between sex groups and social competence	
	problems among secondary school adolescents of Ethiopia .....	91
6.3.4	The prevalence of internalising and externalising problems	
	among sex groups .....	92
6.3.5	The correlational relationship of internalising and externalising problems	
	among Ethiopian secondary school adolescents and the relationship among	
	sex groups .....	95
6.3.6	Correlation of the relationship between age groups and emotional	
	and behavioural problems .....	96
6.3.7	Correlation of the relationship among social competence and	
	syndrome scale problems .....	96
6.4	RESEARCH CONCLUSIONS .....	98
6.5	RECOMMENDATIONS .....	103
6.6	LIMITATIONS OF THE STUDY .....	107
6.7	7SUGGESTIONS FOR FUTURE RESEARCH .....	107
6.8	CONCLUSION .....	108
	List of References .....	109

## LIST OF APPENDICE

### APPENDIX A:

Letter of Permission to Translate and to Use ASSEBA YSR 2001..... 131

### APPENDIX B

Ethical clearance ..... 134

### APPENDIX C

Adama Science and Technology University cooperation letter to East Showa

Educational Office and Adama City Educational Office.....135

### APPENDIX D:

East Showa Educational Office letter of cooperation and consent to sample

schools to conduct the study ..... 136

### APPENDIX E:

Batu Secondary School letter of cooperation and consent..... 137

### APPENDIX F:

Wonji Secondary School consent letter..... 138

### APPENDIX G:

Adami Tulu Secondary School letter of cooperation and consent..... 139

### APPENDIX H:

Letter of consent from Boset Secondary School to conduct the study ..... 140

### APPENDIX I:

Mojo Secondary School letter of consent..... 141

### APPENDIX J:

Awash Melkasa Secondary School letter of consent..... 142

### APPENDIX K:

Oda Bokota Secondary School letter of consent..... 143

### APPENDIX L:

Adama City Educational Office letter of cooperation to Goro Secondary School ..... 144

### APPENDIX M:

Goro Secondary School letter of consent..... 145

### APPENDIX N:

Parents/guardians consent form ..... 146

## LISTS OF TABLES

Table 4.1	
Descriptive statistics of the distribution of items within competence and syndrome scales .....	63
Table 4.2	
Descriptive statistics of population and samples .....	67
Table 5.1	
Descriptive statistics of respondents by ethnicity, sex, grade, language and age .....	74
Table 5.2	
Descriptive statistics of respondents by school, sex and grade levels .....	75
Table 5.3	
Descriptive statistics of social competence scales by sex.....	79
Table 5.4	
Inferential statistics of social competence problems by sex through one way ANOVA .....	80
Table 5.5	
Descriptive statistics of internalising, externalising and total problems .....	81
Table 5.6	
Inferential statistics of syndrome scales by sex through one way ANOVA .....	83
Table 5.7	
Inferential statistics of social competence and syndrome scales by ages through one way ANOVA .....	85
Table 5.8	
Inferential statistics among social competences and syndrome scales.....	86

## LISTS OF FIGURES

Figure 2.1	
Bio-ecological model of human development.....	25
Figure 2.2	
Diagrammatical representation of a summary theoretical framework .....	28



## SUMMARY

The prevalence of emotional and behavioural problems in secondary school adolescents is regarded as widely spread globally. Their effects/pitfalls are also a concern that cannot be ignored. Thus, this study dealt with this issue among adolescents, as well as with pitfalls and practices of secondary schools in Ethiopia, with particular focus on East Showa Administrative Zone of Oromiya National Regional state. Consequently, the study intended to:

- examine what social competence problems (activity problems, social activities problems and academic performance problems) are experienced by secondary school adolescents of Ethiopia.
- determine the relationship between sex groups and social competence problems by secondary school adolescents of Ethiopia.
- examine the trends of emotional/internalising and behavioural/externalising problems among secondary school adolescents of Ethiopia.
- determine the relationship displayed between sex groups and emotional/internalising and behavioural/externalising problems by secondary school adolescents of Ethiopia.
- examine the relationship display between age groups and emotional/internalising and behavioural/externalising problems by secondary school adolescents of Ethiopia.
- comprehend the relationship among social competence problems and syndrome problems by secondary school adolescents of Ethiopia.

To address the objectives of the study, a descriptive survey and correlational study were employed. To achieve this target, the Amharic and the Afan-Oromo versions of Achenbach's (2001) youth self-report (YSR) were used to collect data from 714 research participants of secondary school adolescents out of 27,643 in the East Showa Administrative Zone of Oromiya Regional State-Ethiopia, from 8 secondary schools.

In analysing the data, basic descriptive statistics such as frequency, percentages, percentiles and T-scores as well as ANOVA were employed. In general, the results of the study demonstrated that the prevalence of emotional and behavioural problems of Ethiopian secondary school adolescents was relatively lower (about 9%) in comparison to many other countries. Moreover, girls showed more internalising problems (11.58%) than boys (9.63%) and vice versa in externalising problems. Consequently, girls accounted for 8.6% who fell into a clinical category whereas amongst boys, 14.83% were classified into such as category. In contrary to the other findings males were scored higher than females in withdrawal/depressed subscales (4.23% and 2.74% respectively). Furthermore, statistically significant relationships between academic competences with activities, social activities, somatic complaints, social problems and externalising problems were discovered.

Fulfilling and rendering appropriate guidance and counselling services in the schools comprised the first dimension of the recommendations of this work. Furthermore, establishing school based mental health services to alleviate the problems is another key point of the recommendation to assist adolescents with emotional and behavioural problems in secondary schools of Ethiopia.

## **KEY WORDS**

- Adolescent,
- emotional and behavioural problems,
- Ethiopia, linternalising problems and externalising problems

## **CHAPTER ONE**

### **ORIENTATION AND BACKGROUND**

#### **1.1. INTRODUCTION**

This chapter of the study deals with the background, the statement of the problem, the purpose, the research design and methodology, as well as the outlines of the chapter. In addition, it concentrates on the framework of the study into emotional and behavioural problems of secondary school adolescents in the Showa administrative zone of Oromiya national regional state of Ethiopia.

Ethiopia is a country located in the horn of East Africa. It is bordered by six neighbouring countries: Eritrea in the north, Djibouti in the north-east, Somalia in the east and south-east, Kenya in the south, South Sudan in the west and Sudan in the west and north-west. The area of the country is approximately 1.1 million square kilometres. The population of the country is projected to be over 100 million. Like other developing countries, the majority of the Ethiopian inhabitants are thought to be adolescents. For instance, according to the UN, the median age of Ethiopians was about 19 years (United Nations, 2017). The country is divided into nine national regional states (Amhara, Afar, Benishangul-Gumuz, Gambella, Harari, Oromia, Somali, Tigray and Southern Nations Nationalities and Peoples) and two city administrations that are Addis Ababa and Dire Dawa cities (UNICEF Ethiopia, 2016).

Adolescence is a period during which a great transformation takes place in individuals: in physiological, psychological and social features, as well as being the time in which they set their vocational and educational goals as well as making choices about their life style (Laukkanen, Shemeikka, Notkola, Koivumaa-Honkgnen & Nissine, 2002). Another way of saying this is that adolescence can be explained as the transitional period from childhood to adulthood during which they encounter biological, cognitive, social and emotional changes and which is frequently a turbulent time for them (Hashmi, 2013). Furthermore, adolescence is a period during

which several types of emotional and behavioural problems escalate (Mumthas & Muhsina, 2014). Emotional and behavioural issues like externalising and internalising problems are major concepts associated with the mental health difficulties of adolescents (Veldman, Itmann, Stewart, Ormel, Verhulst & Reijneveld, 2014). Emotional and behavioural problems are also identified by other scholars, such as Zahn–Waxler, Klimes–Dougan and Slattery (2000) and Busari (2014), as internalising and externalising problems. This suggests that such problems are the two broader subcategories of emotional and behavioural problems.

In general, adolescents are challenged by numerous psychological difficulties and if the challenges are unresolved, these may result in many problems, especially if they are not supported by their peers, as peer relationships constitute an important developmental characteristic of adolescents (Hall-Lande, Eisenberg, Christenson & Neumark-Sztainer, 2007). In terms of this understanding, this study focused on the prevalence of emotional and behavioural problems of secondary school adolescents in Ethiopia; it appears to be a matter of concern in the country.

### **1.1.1 Background of the study**

To reiterate, adolescence is a very critical aspect of human life, manifesting great alterations in various aspects of developmental changes: psychosocially, biologically, morally, emotionally and intellectually and so forth. Furthermore, adolescence is a period in which rapid and essential physical, psychosocial, and cognitive changes take place (Laukkanen et al., 2002; Vlasova & Grigutyte, 2013; Mumthas & Muhsina, 2014; Mbwayo & Mathai, 2016). As stated, this stage contributes to enormous physiological, behavioural social-emotional changes, and the relationships of adolescents with their parents as well as with their peers are also fundamentally changed and transformed. As a consequence, this rapid developmental growth of adolescents exposes them to experiencing dissonance in their mental development, causing them to suffer from difficulties emerging from insufficient adjustment to their environments. This may result in stress that leads to the development of depression, anxiety and other socio-emotional problems (Simuforosa, 2013).

On the other hand, adolescence is an important transitional period for social and emotional development, despite it being a risk filled and problematic period (Connell, 2009). Adolescents are faced with multiple levels of challenges associated with, as explained, rapid changes in cognitive, neurological and social-emotional aspects (Steele, Bate, Nikitiades & Buhl-Nielsen, 2015). It is apparent that they need to deal with those multi-dimensional challenges associated with their maturing body as well as relationships with parents, peers and with school.

As a result of accelerated changes affecting different developmental aspects, it seems that adolescents face difficulties in adjusting to their social and physical environment. For instance, Lahey (2004) explains that adolescents encounter significant problems such as conflict with parents, changes of mood and risky behaviours to a greater degree than younger and older people. Of course, one of the reasons that drive adolescents to engage in conflict with their parents is that “many adolescents crave independence and feel that their parents fail to see how much they’ve matured” (Feldman, 2018:378). This in turn, brings about diverse challenges and pressures in social and psychological aspects that may induce emotional and behavioural problems in adolescents. Due to the said parental and social pressures, adolescents may develop emotional, psychological, and behavioural issues that might be manifest in terms of academic, emotional, social and psychological difficulties (Saleem & Mahmood, 2013).

Researchers, such as Hagell (2014) and Lv et al. (2015) have demonstrated that emotional as well as behavioural problems of secondary school adolescents appear to have undesirable impacts on the functioning of individuals. For instance, both internalising and externalising problems encompass adverse effects on the self as well as on others respectively (Zahn–Waxler et al., 2000; McLeod, Uemura & Rohrman, 2012). Similarly, Terzian, Hamilton, Katie and Ericson (2011) pointed out that if emotional problems are left untreated, this will have a major impact on the person’s ability to perform in school activities, social relationships and in achieving their life goals and life goal in general. This describes those students with emotional and behavioural problems who experience failure in different areas where competence is required, such as in academic performance and social relationships

with various groups. Moreover, such students are known for their noncompliant behaviours: withdrawal, anxiety–aggression and disrespecting elders and authorities (Busari, 2014). To sum up, all the above studies indicate that the impacts of emotional and behavioural problems should not be overlooked as these might have more influence on the functioning capabilities of individuals in general.

The main emphasis of this research therefore focussed on secondary school adolescents in Ethiopia, specifically with regard to internalised problems such as anxiety, depression, social withdrawal, somatic complaints, as well as on externalised problems such as aggression and rule breaking behaviours. The focus of the study was thus on the main characteristics or components of emotional and behavioural difficulties, which are rooted with these central themes. Furthermore, the said problems of such adolescents in the case of Ethiopia appear to be an untouched area of investigation, which calls for more attention.

In brief, this is why I was interested to conduct research on the prevalence of emotional and behavioural issues and ways these could affect secondary school adolescents in Ethiopia. So far, it seems little or no research has been conducted here in this regard, to the best of my knowledge. For instance Harder et al., (2014) pointed out the majority of the YSR multicultural studies were from developed countries, except one in Sub-Saharan Africa–Ethiopia–an unpublished dissertation using the YSR by Mulat (1997). However, even this study (by Mulat) was not focused on adolescents, but rather on children. Therefore, investigation into the issues mentioned is required so as to yield some contributions in this regard. Accordingly, this study's topic emerged.

### **1.1.2 Awareness of the problem**

As indicated, emotional and behavioural problems, if left untreated, could in general affect individuals' functional capabilities. Consequently, there is a need to give attention to scrutinising the extent of the prevalence of the given issues among adolescents so as to be able to realise their full potential. From this perspective, school adolescents need to be a well nurtured cultivated generation. Therefore,

those who are affected with emotional and behavioural problems required to be productive citizens who are ready to shoulder vital roles in the development of their country as much as possible.

It is the school, in addition to the parents and the community at large, that to a great extent is responsible to nurture the school-going adolescents to be equipped for their future career and to achieve their goals. Schools are accountable for assisting adolescents in addressing emotional and behavioural problems that could hamper them from achieving their full potential.

The prevalence of both emotional and behavioural problems seems more extensive in school adolescents. In this regard, Reijneveld, Wieggersma, Ormel, Verhulst, Vollebergh, and Jansen (2014) identified that the prevalence of emotional and behavioural problems in adolescents ranges from 10% to 25% of the general population. Furthermore, Sales and Irwin (2013) argued that adolescence is a developmental stage of exploration and risk-taking behaviours which may be described as turmoil and which challenge daily life functioning. Consequently, adolescence is recognised as a critical period for both physical and mental development, which in turn, may lead to the emergence of different aspects of psychosocial challenges (Lv, Wan & Fu, 2015). This was one of the reasons that demanded examination of adolescents' behavioural and emotional problems in a research study.

Since many school-aged members of the population demonstrate such issues, schools are expected to be academically supportive of adolescents with emotional and behavioural problems (Busari, 2014). However, many students with such difficulties also have many academic and social adjustment problems (Busari, 2014). Therefore, it could be said that these students benefit less from schooling compared to other peer groups.

Adolescents may be excited to practice what are considered as good or bad behaviours within the limit of their environment. These might have consequences in demanding individuals from social, psychological and emotional perspectives. These

consequences may in turn be reflected in the form of internalising or/and externalising problems. Again, these may affect the realisation of the full potential of adolescents in schooling and other anticipated goals in the lives of the individuals. Many factors may be attributed to the escalation of emotional and behavioural problems of secondary school adolescents. These factors could be environmental, social or personal practices of successes or failures such as school failure, social adjustment and the like. In addition, the developmental period and various psychological aspects impacting adolescents may be underlying factors as indicated by different scholars (Rosa and Tudge, 2013; Suarez-Balcazar, Balcazar, Garcia-Ramirez and Taylor-Ritzler, 2014; Dirks, Persramb, Recchia and Howe, 2015; Melchert, 2015).

Adolescents are confronted by many different issues that expose them to the possibility of internalising and externalising problems (Steele et al., 2015). This could also hold true in the case of secondary school adolescents in Ethiopia, since they are not free of internalising and externalising difficulties. The said emotional and behavioural problems, if not well dealt with, could, as noted, possibly challenge the adolescents and result in negative consequences. This may hamper their functioning abilities as related to academic, social and emotional matters.

As a matter of fact, these unresolved challenges may possibly affect various dimensions of adolescents' psychological, socio-emotional and educational performance. In Ethiopia it seems that the emotional and behavioural problems of adolescents and the related effects appear to be overlooked or given less attention than needed. It has however been observed that the diverse, unwanted activities some secondary school adolescents engage in, such as chewing chat/Khat, breaking school rules and engaging in violation could be symptomatic of emotional and/or behavioural problems.

In the view of the above discussion, it is obvious that adolescents are challenged by various difficulties, resulting in these seemingly affecting their functioning capabilities. Therefore, considering the above explanation and evidence provided so



far, I was interested in studying the emotional and behavioural problems of secondary school adolescents in Ethiopia.

## 1.2 PROBLEM STATEMENT

As indicated, different research findings have shown that emotional and behavioural problems result in significant impacts on the different functioning aspects of individuals. With regard to the focus of this research on adolescents, the impact might be related to school performance, social functioning and other psychological areas (Hall-Lande, Eisenberg, Christenson & Neumark-Sztainer, 2007; Veldman et al., 2014). Correspondingly, internalised problems have an enormous effect on an individual's capabilities by affecting the relationships to their families and friends and school performance as well as impacting on the wellbeing of individuals, as mentioned above, in terms of psychological perspectives (Karevold, 2008).

Although many research studies (Pathak, Sharma, Parvan, Gupta, Ojha & Goel, 2011; Risper, 2012; Korhonen, Luoma, Salmelin, Helminen, Kaltiala-Heino, & Tamminen, 2014; Symeou & Georgiou, 2017) have been conducted on emotional and behavioural problems among adolescents in different countries, in the case of Ethiopia, there does not seem to have been any similar research undertaken (Harder et al., 2014) despite it being a critical research area. Related to this, there are some observed signs and symptoms, described above and which, as suggested earlier, could be the manifestation of emotional and/or behavioural problems that point to inadequate support from schools.

Behavioural problems in the secondary schools of Ethiopia have become a serious problem and disturb the teaching-learning-process by causing psychological and physical discomfort to many students as well as to teachers (Beyene, 2016). The study by Alemayehu (2012) in Shashemenet -one of the biggest towns in Ethiopia, recognised that the prevalence of misbehaviour in secondary schools was very high as well as extremely stressful and that the worsening situation is increasing with time. These studies could be good indicators of the behavioural and emotional problems of secondary school adolescents in Ethiopia. Therefore, this necessitated

giving due consideration to the said issues to investigate the pattern of these difficulties as well as of related effects on the performance and functional capabilities of secondary school adolescents in the country.

### **1.3 PURPOSES OF THE STUDY**

This study has placed emphasis on the emotional and behavioural problems among adolescents at secondary schools in Ethiopia. Accordingly, the objectives of this study are to:

- Examine the social competence problems (activity problems, social activities problems and academic performance problems)
- Determine whether or not social competence problems vary according to gender groups.
- Examine the trends of emotional/internalising and behavioural/externalising problems among secondary school adolescents of Ethiopia
- Determine whether or not internalising and externalising problems vary according to sex and age among secondary school adolescents in the study area
- Examine the relationship displayed between age groups and emotional/internalising and behavioural/externalising problems by secondary school adolescents in the study area
- Analyse the relationships between social competence problems and categories and subcategories of emotional and behavioural/syndrome problems of secondary school adolescents of Ethiopia.

### **1.3.1 Research questions and hypotheses**

It has been asserted that emotional and behavioural problems are fundamental health issues in adolescence (Wang, Liu & Wang, 2013). It has been indicated that many adolescents were suffering from such difficulties worldwide (Lv et al., 2015) and if these are not managed properly, this may possibly affect different aspects of adolescent development (Busari, 2014). The questions raised in this research were:

#### **Research Question 1:**

What social competence problems do secondary school adolescents in Ethiopia experience?

#### **Research Question 2:**

What are the trends of emotional and behavioural problems among Ethiopian secondary school adolescents?

Chapter four specified the hypotheses developing from this research questions. The hypotheses identify the key abstract concepts involved in the research and its relationship to both the problem statement and the literature review. The hypotheses are clear statement of what is intended to be investigated.

## **1.4 RESEARCH DESIGN AND METHODS**

A research design denotes a framework or a plan that is used as a guideline or direction in conducting research activities (Pandey & Pandey, 2015). Since it is a plan or a map, it needs to be clearly identified and specified so as to conduct a research project in a systematic and scientific manner. In this regard, different approaches and methods are associated with the development of suitable research designs for conducting research activities efficiently and intelligently.

A quantitative approach was considered a suitable and applicable one for this study because quantitative research methods are ways of explaining phenomena by collecting data numerically and analysing them using mathematical applications (Muijs, 2004). Internal human demeanours, such as feelings, attitudes and opinions, which appear in qualitative form, can be measured by appropriate research instruments aimed at converting phenomena that are not in quantitative form so that they may be conceivably changed into quantitative data (Muijs, 2004). In other words, datum which appears in qualitative form can be changed into quantitative or numerical data through appropriate research instruments.

The methods applied to investigate this study were survey and correlational methods. Survey research methods encompass the gathering of information directly from the population representatives (a sample) who respond to a number of questions regarding their opinions, thoughts and behaviours; this is most likely to take the form of questionnaires (OpenStax College, 2013). Furthermore, contrary to individual or small group investigations, such as in a case study, survey studies deal with the investigation of large groups of a population (Bernstein, Nash, Clarke-Stewart, Penner & Roy, 2008).

Furthermore, in this study the correlational method was used. This was because correlational study was aimed to investigate and discover the relationships between two or more aspects of variables or phenomena (Kumer, 2011). Overall, correlational researches are directed to investigate relationships between different variables, so as to examine the research data more meaningfully in order to test predictions, to evaluate theories and to suggest new hypotheses about the behaviours of population under investigation (Bernstein et al., 2008).

The explanations provided above were the major reasons why survey and correlational methods were considered as a better fit approach to this study. On the other hand, data were generated from a large sample of the chosen population group such as 714 of the total selected population group of 27643. The findings are intended to be generalised to the larger population. Besides, relationships among variables within that large population would be calculated in a better way.

## **1.5 ETHICAL CONSIDERATIONS**

Since the research is intended to deal with different organisations and individuals, it is very important to obtain approval from the individual/s and/or relevant bodies concerned, before starting to work on a research project (McQueen & Knussen, 2013). This is because the research activities may disturb or hamper the normal functioning of the organisation. Moreover, they may even affect the psychological and social aspects of an individual. Therefore, since this study was conducted using secondary school adolescents found in East Showa administrative Zone, gaining permission to gather data from the educational office of that zone of and others, was essential. Hence, at the very beginning, written permission was obtained from East Showa Educational Office concerning the sample schools as well as a copy to each Woreda Educational Office. All those letters are attached in the Appendixes part of this thesis. In addition, the research and ethical principles of the UNISA research guidelines were adhered to.

## **1.6 SIGNIFICANCE OF THE STUDY**

This study appears to be the first of its kind being researched in Ethiopia, which illustrates a lack of understanding and appreciation of the proposed problem. It helps to realise what the current practices and trends of emotional and behavioural problems of adolescence in Ethiopian secondary schools and the types of drawbacks there are in realising the full potential of adolescents. As a result, the study findings provide substantial information to the different organisations, educators and educational experts of the country. Through the provision of knowledge, teachers, parents of adolescents and other stakeholders working with secondary school adolescents can contribute more in their roles in helping school adolescents to develop better managing strategies in overcoming the emotional and behavioural challenges they are facing. Accordingly, the results of this study may provide some knowledge on the issue under discussion for the Ministry of Education, the Regional Education Bureaus and the Woreda Education Office as well as the teachers and school community, the parents of adolescents and other stakeholders working with secondary school adolescents. The findings may assist them as they

engage in planning and executing different programmes that could be considered as a possible means to alleviating the mentioned problems. Furthermore, this research might serve to make the abovementioned persons and bodies more aware and able to appreciate the problems faced by adolescents. It could also assist them to design suitable devices for discussing the possible solution related to the problems and deciding on the implementation of the designed strategies in collaborated efforts.

It is thought that the findings of this study have the following implications:

- It gives sufficient information to the ministry of education and the national regional educational bureaus about the status of secondary school adolescents in respect of emotional and behavioural problems. Therefore, this enables them to take responsibility in assigning and employing guidance teachers and counsellors to every school. It is predominantly their responsibility to fulfil the potential of human resources and to address education and training in the country, including for educational policy makers. Furthermore, using the Department of Education's relationship with the Minister of Health to provide mental health services in the schools could be initiated by means of a process by the Ministry of Education and the National Regional Educational bureaus. In this regard, they could require the organisational structure to extend to the Woreda Educational and Health offices to cause the mental health services to be offered in school the better practice.
- It provides information to the schools and the Woreda Educational Offices to make them aware of the pervasiveness of the problems and the drawbacks in the implementation of the educational policy as well as the effects of emotional and behavioural problems on the realisation of the full potential of school adolescents. Thus it will encourage them to initiate some remedial actions in collaboration with the concerned parties within their vicinity: parents and counsellors as well as health professionals and NGOs.

- It could play a role in assisting the school teachers, school administrators and the student representatives as well as the parent-teacher association to provide the necessary support and follow-up for the implementation of guidance and counselling and mental health services in the schools, in collaboration with different concerned bodies.
- It provides more information to the parents of adolescents concerning how and what roles they have to take in alleviating the problems of their children. In this regard it would enable parents share the responsibilities of working with the school in a collaborative effort be to part of a solution in alleviating the problems faced by the schools and school counsellors and mental health service providers.
- Furthermore, the research findings may encourage and inspire other researchers to conduct associated studies and to explore related concerns to solve interrelated problems.

## **1.7 DELIMITATIONS**

The study was conducted to examine emotional and behavioural problems among secondary school adolescents in Ethiopia. The age of the population of this study ranges from 13 to 18 years because these adolescents in Ethiopia mainly fall within this age group.

This study focused on major populated areas of secondary schools in Ethiopia, according special attention to the East Showa Administrative zone of Oromiya National Regional State. Most of the inhabitants of the said State are of the Oromo nation as indicated by the name of the region itself, with the second biggest group being the Amhara nation. Almost all of the nations of the country comprise the population of the Oromiya region; there are very few other inhabitants in the said regions.

## **1.8 OPERATIONAL DEFINITION OF TERMS**

It seems necessary to provide some operationally defined terminologies to ensure the reader understands and conceptualises the concepts precisely as they are intended to be conveyed by the researcher. Therefore, the following terms are defined so as to achieve a clear common understanding.

### **1.8.1 Adolescents**

The age group of adolescents has been differently defined by various scholars but the definitions are more or less similar. Achenbach and Rescorla (2001) explained that the Youth self-report (YSR) form of ASEBA needs to be filled in by youth whose ages are 11 through 18 years, since this age group is considered to be adolescent. The classification of adolescence might however vary from culture to culture and environment to environment (Feldman, 2018). Nevertheless, this study considered secondary school Ethiopian adolescents' ages as ranging between 13 and 18 years. Thus, adolescents referred to in this study are secondary school learners with an age range of 13 to 18 years old.

### **1.8.2 Secondary school**

According to the Federal Democratic Government of Ethiopian Education and Training Policy (1994), the structures of school grades are classified as: primary school grades 1- 8 and secondary school grades 9 and 10. After completing secondary school studies, students who passed the secondary school Living Certificate Examination, based on merit, will either enter Technical and Vocational Education training or else proceed to preparatory school; that is, grades 11 and 12 that is the continuation of grade 10. Therefore, this study focused on secondary school adolescents who are 9th and 10th grade students.



### **1.8.3 Emotional and behavioural problems**

Emotional and behavioural problems include anxiety/depression, social withdrawal/rejection, aggression, attention deficit hyperactivity disorder (ADHD), academic problems, somatic disorders and the like. In this regard, Bordin, Rocha, Paula, Teixeira, Achenbach, Rescorla and Silves (2013) specified that emotional problems based on the YSR 2001 syndrome include: anxiety/ being depressed, withdrawal/being depressed, somatic complaints, social problems, thought problems and attention problems, whereas behavioural problems include rule-breaking behaviours and aggression issues (Achenbach & Rescorla, 2001). In this study the emotional and behavioural problems involve total problems or the combination of internalising and externalising behavioural problems. In other words, these include anxiety/depression, withdrawal/rejection, somatic complaints, aggression, and rule-breaking.

### **1.8.4 Internalising problems**

To recapitulate, the YSR score on syndrome profiles is an eight scale Empirically Based Syndrome represented as: anxious/depressed, withdrawn/depressed, somatic complaints, social problems, thought problems, attention problems, rule breaking behaviour and aggressive behaviours. Of these Eight Scale Empirically Based Syndromes, anxious/depressed, withdrawn/depressed, somatic complaints are classified as internalised problems, whereas both rule breaking and aggressive behaviours are considered as externalised problems, while internalising and externalising problems are regarded as total problems or emotional and behavioural problems (Achenbach & Rescorla, 2001).

### **1.8.5 Externalising problems**

Externalised behavioural problems are problems associated with an individual's outward behaviours such as rule-breaking, aggression and delinquency behaviours (Symeou & Georgiou, 2017). In other words, these are behaviours that are intended to harm or hurt others. However, Achenbach and Rescorla (2001) consider

aggressive behavioural problems and rule-breaking to be externalised behavioural problems. In general, in the current study rule-breaking and aggressive behavioural problems are considered as externalising problems.

#### **1.8.6 Pitfalls of emotional and behavioural problems**

The pitfalls of emotional and behavioural problems of secondary school adolescents refer to problems of social competence. These include problems associated with activities, problems associated with social interaction and problems with academic performance of school adolescents in general (Achenbach & Rescorla, 2001).

### **1.9 CONCLUSION**

This chapter presented an overview of the study, the purpose of which was to describe the prevalence of emotional and behavioural problems experienced by secondary school adolescents in Ethiopia, and the effects of these problems on the competences/ functioning of adolescents. Furthermore, emphasis was given to the introduction and orientation of the study, and problem statements and objectives of the study as well as leading questions and hypotheses were incorporated. In addition, the research design and methods were also included and discussed and the ethical considerations, significances and delimitations of the study were described. Finally, an operational definition of terminologies and outline of the chapters were provided in this chapter.

The next part of this thesis is Chapter two, in which overviews of the theoretical frameworks of the study are documented and explained. The section dealing with the theoretical framework focuses mainly on the major theories that are concerned with the human being's lifespan development. Furthermore, a concise model of the conceptual framework that summarises different theoretical frameworks is devised to show how different factors prompting emotional and behavioural problems of individuals are interwoven.

## 1.10 CHAPTER OUTLINE

Over and above this chapter, reviewed above, this study comprises the following chapters.

**Chapter Two:** This chapter presents the theoretical and conceptual frameworks of the study. These include the ecology, biological and bio-ecological theories of human development. These theories were considered as theoretical frameworks, because they are effective and comprehensive in explaining how individual development is influenced in general and the development of emotional and behavioural problems, in particular. Correspondingly, a summarised model of the conceptual framework is incorporated.

**Chapter Three:** The chapter presents a review of the literature related to this current study. Briefly stated, it examines concepts and issues related to adolescents and their development and the prevalence of emotional and behavioural problems experienced by adolescents. Similarly, the review incorporated the work of other researchers related to factors affecting the development of individuals.

**Chapter Four:** Within this chapter the research design and methods used to conduct the investigation are explained. In addition, population and sampling, data collection methods and methods of data analysis as well as discussion on the validity and reliability of the research and the ethical considerations are included.

**Chapter Five:** This chapter encompasses the presentation and analysis of the collected and organised data. Furthermore, the demographic characteristics of the respondents, social competence/adaptive functioning, syndrome/problem scales results and a summary comprise the main sections of the chapter.

**Chapter Six:** This chapter focuses on the summary, conclusions, recommendations and limitations of the study. It presents a synthesis of the introduction and summary, findings of the study, conclusions and recommendations. It also encompasses the

limitations of the study, and suggestions for future research. Finally, the chapter is briefly summarised.

## **CHAPTER TWO**

### **THEORETICAL AND CONCEPTUAL FRAMEWORK**

#### **2.1 INTRODUCTION**

In the first chapter, the orientation and background of the study, the statement of the problem, research questions and hypotheses, research design and methods of the study, as well as an outline of the division of chapters were presented. The intention of this chapter is to provide a review of the literature that serves as the theoretical framework of the study. Accordingly, the ecology of human development theory, the biological factor theory and the bio-ecological model of human development theories are discussed in brief. Similarly, a summary of the model of the conceptual frameworks, with special reference to factors affecting human development in general and emotional and behavioural development in particular, are included in this chapter. These theoretical frameworks were selected because of their comprehensiveness in explaining how human development is affected and influenced throughout one's lifespan.

#### **2.2 THEORIES OF EMOTIONAL AND BEHAVIOURAL PROBLEMS**

Individuals who are suffering from emotional and behavioural problems demonstrate a very wide range of characteristics such as depression, feelings of anger or frustration, acting shy and withdrawn, aggressive/violent toward others in magnified manner or pattern than their peers (Quinn et al., 2000). The theories for the development of such problems are sourced from various theorists who have diverse perspectives. There are differing theories and research findings on the emotional and behavioural problems of individuals. Different approaches/theories try, in different ways, to explain the causal attributing factors for the development of emotional and behavioural problems.

It appears that most of the prominent theories that explain the development of human beings are: the ecology of human development theory, the biological factor theory and the bio-ecological model of human development theory. Their views

regarding the development of emotional and behavioural problems were based on different standing points and most likely researched in a different manner. Nonetheless, these theories are considered to be well justified and good scientific explanations that are accepted by the scientific body and acknowledged as well as having made a contribution regarding the development of individuals' diverse positive or negative behaviours. The abovementioned three theories are therefore elaborated on and reviewed regarding the factors associated with each of them that contribute to the development of the said problems. These theories are discussed and reviewed below concerning the ways in which they approach the subject and to what they attribute the causal roots of the given problems.

### **2.2.1 Ecology factors of Human Development theory**

The development of an individual is affected and determined by the biosphere in which they interact and involved throughout their lifespan. Age related cognitive, emotional and behavioural developmental changes are indispensable processes for the development of health and competence or maladjustment and disorders of an individual (Melchert, 2015). This is because individuals mature as they age, affording many opportunities for interaction with their ecology. This in turn affects their emotional and behavioural development and the health condition of an individual. In this regard, the study by Taylor, Jacobson and Roberts (2000) argues that those social contexts in which adolescents live directly and/or indirectly affect individuals' behaviour.

The family, the neighbourhood, the peers, the schooling, the school environment and the way by which the individuals interact as well as experiences in the community directly or indirectly play important roles in the development of healthier or maladjusted behaviours. In addition, the authors emphasised that the extent to which adolescents engage in problematic behaviours with peers and the reaction of their parents towards that behaviour may in turn affect the adolescents' engagement in such types of problematic behaviours in the future (Taylor et al., 2000).

In general, individual development and functioning capabilities are the outcomes of the interplay among hereditary, biological and individual psychological processes, socio-cultural and historical features of the community through which the individual is supposed to be cultivated (Melchert, 2015). Consequently, some of the important aspects of ecology theory are related to the parental living conditions, school related factors and social contexts. Hence, factors related to parents/guardians and factors related to school and social contexts, which are expected to contribute a great deal to the development of emotional and behavioural problems of adolescents, are provided below.

#### *2.2.1.1 Family related factors*

The study by Sijtsema, Oldehinkel, Veenstra, Verhulst, and Ormel (2014) on a sample population of 2,230 adolescents who were between 10 and 20 years old, concluded that both the structural family characteristics (socio-economic status, family composition, family psychopathology) and dynamic family characteristics (parental warmth and rejection) had a greater effect on the development of aggressive and depressive problems in adolescence. It was particularly noted that the impact of dynamic characteristics by far exceeded the effect of the families' structural characteristics. Moreover, the early childhood living environmental conditions together with the caregiving relationship comprises one of the factors that leads to a borderline personality (Steele et al., 2015). In one way or the other, such a personality may be related to the development of emotional and behavioural problems of an individual. This is because the individuals are deviating from the so-called normal personality.

The development of emotional, behavioural and psychological problems that may have adverse effects on academic, social or emotional progress could be caused by parental and social pressure on the adolescents (Saleem & Mahmood, 2013). Furthermore, the parent and adolescent relationship and negative life events of adolescents are among the strongest contributors that have an enormous impact on the prevalence of these types of problems in adolescents (Wang et al., 2013). The parental influence on adolescents is not just that what happened during their

adolescence had a major impact on their development; it could be the result of a cumulative effect of the parents' relationship with and treatments of the adolescent as a child in their earlier life experiences and interactions that might have affected different developmental aspects of the individual. Subsequently, directly or indirectly, the previous experiences of individuals with their parents play a significant role in the development of individual characteristics (psychological, moral, behavioural, emotional, and so forth).

To sum up, as indicated above, factors that relate to parents such as socioeconomic conditions, behaviours and interactions with their children have a considerable effect on the development of emotional and behavioural problems of adolescents. This firstly implies that the responsibility for the normal development of an individual falls heavily on the shoulders of parents. Therefore, parent-related issues play a major role for either the maladjustment or the healthy development of their children.

#### *2.2.1.2 School related factors*

School is one of the important environmental factors responsible for the development of an individual. However, schools can sometimes be contributors to maladjusted development of the different functioning or psychological aspects of an individual. Proper and appropriate school environments are important aspects for the students' development of personality since children spend most of their time in school (Lawrence & Vimala, 2012). Furthermore, school environments greatly dominate how the students behave and interact (Odeh, Oguiche, Angelina & Dondo, 2015).

School structure, school composition and school climate are important influences on the academic success and performance of students (Korir & Kipkemboi, 2014). For instance, sound educational processes can occur better in normal physical, social, cultural and psychological settings and environments (Lawrence & Vimala, 2012). In general, from these explanations, it is possible to deduce that the school environment has a great impact on shaping and moulding the behaviour of adolescents. For example, if the school environment and interaction with others encourages a sense of aggression, there is a tendency for one to be motivated to



engage in aggressive acts/behaviours. In another example, if an individual is embarrassed by aggressors they may feel discomfort in the school environment. This feeling may, in turn, lead her or him to withdraw or become depressed, or exhibit fear and anxiety. Conversely, the feeling of discomfort might elicit a tendency to show defensive and aggressive behaviours. Thus, this discussion on school related factors, constrains one to consider that school related factors could be the cause for the development of emotional and behavioural problems.

### *2.2.1.3 The social context*

It is to be expected that the behaviour of individuals is affected by the social context. One of the influential aspects of the social context consists of culturally dependent social roles (Matsumoto, 2007). Social roles arise from expectations and normative behaviours that emerge from basic human interaction within specific ecological contexts in which groups, through a process of environmental adaptation, exert pressure on an individual's behaviour (ibid). Different communities display different culturally dependent social roles; hence the individuals living in a different social environment are affected by different cultural roles. It is anticipated that individuals need to behave in accordance with the cultural norms of a society. For instance, in a community where there are conflict and a violent social environment, an individual tends to develop such types of behaviours, whereas in an area where attitudes are reflected in a community's prejudice against some ethnic group, it is likely that the individuals may demonstrate similar behaviours or attitudes.

## **2.2.2 Biological factors theory of human development**

Changes in biological factors that involve the development of the neural system/ brain, and different hormones and the endocrine system, according to the biological blueprint, bring about radical variations in different aspects of the development of adolescents. For instance, these could be in the areas of functional capacities, behaviour and emotions, cognition or moral and other developmental aspects of individuals. The quality of a teenager's thinking increases with the development of

the spurt in growth of the parietal and frontal lobes in the brain as well as in the subcortical regions (Dacaye & Travers 2009).

The physical developments that take place during adolescence, particularly the changes that occur in puberty, are: physical maturation, hormonal and bodily changes, adolescent sexuality, and the brain (Santrock, 2006). These are dominant biological changes that are responsible for the development of individual behaviours and personality in general. Of course, environmental attributes, like nutrition – an important component for change – interacting with hereditary factors in affecting the development of individuals, are responsible for these physical changes. Overall, these fundamental changes during the pubertal period are common biological experiences worldwide (Vlasova & Grigutyte, 2013).

Concerning the development of the brain, Santrock (2006) explained that the developmental change in the area of the brain responsible for emotional and higher thinking skills, like the amygdala and prefrontal cortex respectively, are the major change agent areas. Carlson (2013) emphasised that various emotions such as fears are controlled by the amygdala. Dacaye and Travers (2009) also considered the rapid growth of frontal lobes of the brain as being responsible for different behaviours, such as information processing and highly developed thinking and increases during pubertal.

Developmental changes of the brain, as in the aforementioned amygdala, prefrontal cortex, and frontal lobe, are responsible for the manner in which adolescents' development of emotional and behavioural functioning occurs, which is different from the other developmental periods. It is indicated that adolescence is a risky/problematic period during which the environmental pressure may be stronger than the brain's development, inducing an imbalance between reactive and regulatory neural processes (Powers & Casey, 2015).

As a summary, during adolescence, the extent of neural changes in the brain regions, which are critical for mediating sensitivity to unpleasant stimuli, perception and expression of emotions, the lack of controlling impulsivity which supports the

occurrence of risk taking behaviour, are obvious (Spear, 2010). Thus, biological factors, especially the rapid development of the brain regions as well as other physiological and anatomical developmental changes during adolescence, combined with the interaction of these diversified environmental contexts, may result in some adolescents having difficulty in keeping the balance if they are not assisted. Hence, these could be contributors to the emerging or intensifying of emotional and/or behavioural problems if they are not well managed so as to keep the balance between the rapid biological changes of experienced by adolescents and the environmental situation.

### 2.2.3 Bio-ecological model of human development theory

The current study is guided and places more emphasis on the bio-ecological theoretical framework, even although this is not the only means by which emotional and behavioural problems of adolescents are explained. However, this theoretical framework is selected because of its comprehensiveness in explaining how human development is affected and influenced by the interaction of the individual with their ecological factors. Hence, the bio-ecological model of human development theory is briefly described below.



**Figure 2.1: Bio-Ecological Model of Human Development (Feldman, 2018)**

Bio-ecological theory is focused on the interaction of the individual and the environment as well as the influence of environment on the development of individuals and vice versa, such as the cultural and socio-political environment (Suarez-Balcazar et al., 2014). The ecological systems, in which an individual is

expected to develop and function, are categorised as: the microsystem, mesosystem, exosystem and macrosystem (Melchert, 2015).

The microsphere/microsystem is the immediate environmental situation or component that has a positive or negative developmental impact upon the development of a child. It includes the family, the neighbourhood, friends and schools, churches and health services that are the closest environment with which the child will interact. From the very beginning, the individual is influenced by as well influencing the environment, especially the family, which plays a dominant role in individual development (Rosa & Tudge, 2013). In other ways, microsystems are situations in which individuals have direct roles, experiences and interactions, such as with a daughter, sibling, family meals, reading with mother/father and the like (Neal & Neal, 2013). For instance, the interaction of siblings displays some sort of connection with the development of the internalising and externalising of problems; because sibling interaction plays a critical role on the development of individuals—either positively or negatively (Dirks et al., 2015).

A mesosystem is related to the interactions that exist among family, schooling, peers and neighbours. Put briefly, a mesosystem is the interaction within the microsystem itself (Rosa & Tudge, 2013). Likewise, it is a system by which the microsystems are interwoven that may include the interactions among parents, the schooling with the children and the like (Neal & Neal, 2013).

On the other hand, the exosystem refers to the relationship that exists within settings, such as the extended family, educational system, legal services, public agencies, mass media and friends of families of children's (Rosa & Tudge, 2013). Besides, exosystem refers to that by which mesosystems are nested; although individuals have no direct roles and interaction with the settings, however they influence individuals (Neal & Neal, 2013).

Owing to the fact that the macrosystem refers to factors such as socioeconomic condition, ethnic groups, religions, beliefs and ideologies that have influences on the development of an individual (Rosa & Tudge, 2013), this includes wide-ranging

cultural influences, and ideologies that have an effect on individuals (Neal & Neal, 2013). Whereas the chronosystem/macrosystem deals with the individuals' and the environmental changes across a period of time, with the historical and political situations by which an individual is confronted within his or her living conditions or contexts (Rosa & Tudge, 2013). In other ways, a chronosystem is a continuous transition process across a lengthy period of time by which individuals are influenced by each other's systems, just like their transfer from primary school to high school or the onset of puberty (Neal & Neal, 2013).

Human development and functioning capabilities are controlled and governed by the interaction among genetic and biological and individual psychological processes with different levels of socio-cultural, socio-economical, historical contexts by which an individual is supposed to live (Melchert, 2015). Besides, the originator of the systems theory of development, Bronfenbrenner, illustrates that an individual's development is the result of the interrelation among different important elements such as the context, process, time, and the individuals' own traits (Manitoba Education Research Network, 2011).

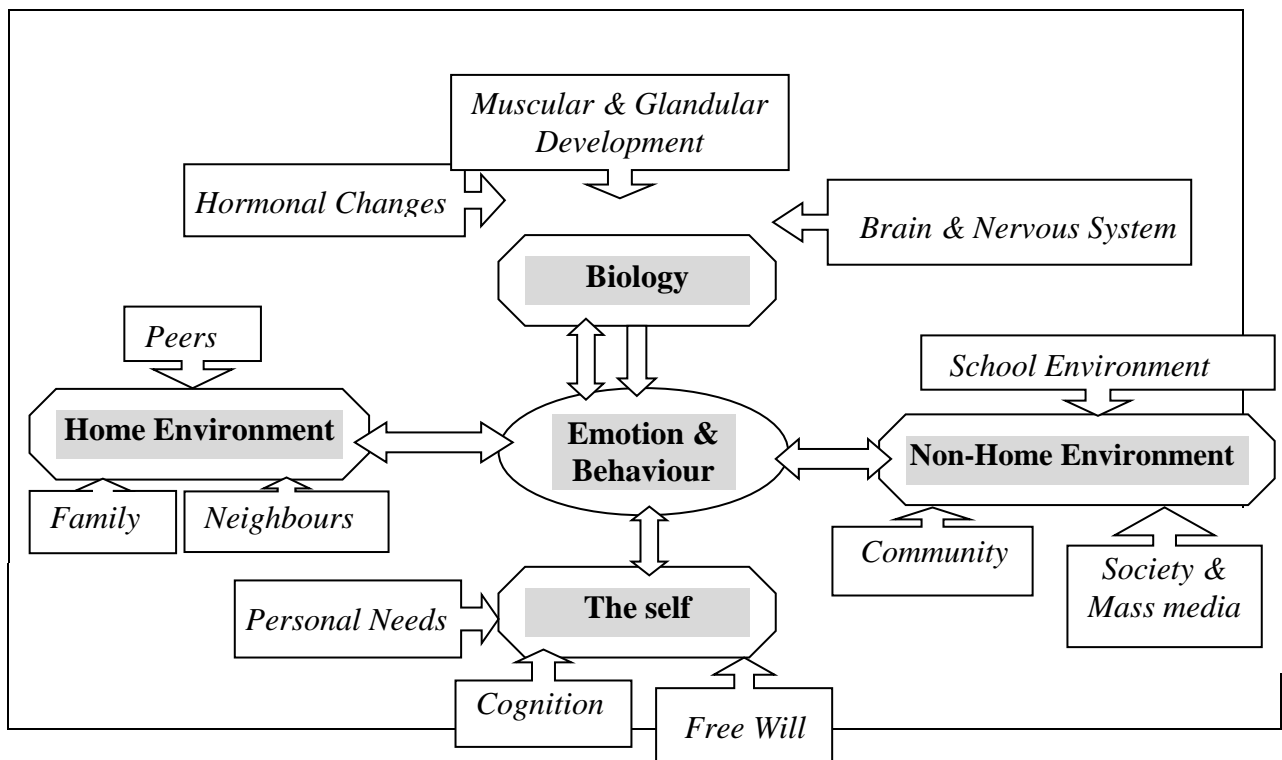
Subsequently, the individual starts to interact with his/her immediate environment that includes the family members: parents/guardians, siblings and the home. This is followed by the neighbourhood and the peers who affect the behaviour and the emotion of individuals. Subsequently the interaction of the individual goes beyond the neighbourhood to the schooling and related environments. Finally the interaction proceeds further than the community into society and the world.

Accordingly, any individuals are supposed to "swim" (to use a metaphor) through all these bio-ecological conditions throughout their lifespan. Of course, the interaction within the process is full of challenges, obstacles and harmful as well as joyful circumstances. The issue here is how individuals swim in this wider and deeper "ocean" which is full of harmful practices, stronger storms and more challenging conditions and depends upon what swimming skills and practices they have obtained in accordance with the biological changes of the individual. Consequently, if an individual has acquired positive life experiences and practices, in turn he/she will

have a normalised experience. On the other hand, if they have had the worst life experiences and practices during their development it would not be difficult to predict what types of emotional and behavioural problems in general and adjustment problems in particular, would result.

### 2.3 A SUMMARY OF THE MODEL OF CONCEPTUAL FRAMEWORK

The conceptual framework of behavioural and emotional development of individuals could be described as the following. Emphasis is placed on three major aspects that are expected to govern and affect the development of an individual in general and that escalate the development of emotional and behavioural problems of individuals in particular. These important developmental components of such problems are: the biological aspect; the environmental aspect and, the self. These will be discussed as follows.



**Figure 2.2: Diagrammatic representation of a summarised model of the theoretical framework**

The broad-spectrum view of biological mechanisms that affect the behaviour of individuals takes into account: the development of muscles, glands, hormones, the nervous system and the brain. For instance, adolescents lose approximately 1% of the grey matter of their brain every year between 13 and 18 years; additionally, the growth spurt in different parts of the brain, especially the prefrontal cortex which is responsible for advanced reasoning and other important thoughts as well as managing impulses, and the development of the brain, may have significant impact on adolescents' ability to develop the capacity to control many thoughts and emotions (McNeely & Blanchard, 2009).

Hormonal changes, for instance the increase in the discharge of gonadal hormones during the pubertal period, will affect the sexual characteristics of individuals (Spear, 2010). Similarly, testosterone and dehydroepiandrosterone (DHEA) are major hormones that are responsible for the advancing of secondary sexual characteristics. While androgens facilitate masculine development, estradiol and oestrogen facilitate feminine development (Shirtcliff, Dahl & Pollak, 2009). Similarly, the adrenaline hormone energises an individual, because it causes the body to release more glucose in the blood stream, increases the heart's rate of pumping blood and increases oxygen intake. These arouse the body and the muscles to perform in certain ways. Adolescents engaging in risky behaviours are assumed to be doing so because of biological factors that influence the said risk taking behaviours; through genetic predispositions; direct hormonal influences; the influence of asynchronous pubertal timing (i.e., earlier or later timing than peers), and brain/central nervous system development (Sales & Irwin, 2013).

Individuals have biological and social needs for survival; meeting those needs depends on the degree to which people can adapt to their specific environments by using their knowledge and their skills (Matsumoto, 2007). Different environments introduce diverse problems that humans must deal with in order to survive (ibid). This is a simple explanation of how the environmental factors (social and physical) affect the ways in which individuals behave and are influenced by the environmental situation depending upon what the person is endowed with.

As noted, environments play a major (though not the only) role in the development of individuals. The environment may be classified into two key categories: the home environment and the non-home one. The home environment includes the immediate environmental components with which individuals interact, such as the families, the neighbourhood, the peer group. These components shape and influence the behaviour of individuals from the very beginning of their lives and throughout their lifespan. The interaction with the affection of the parents, supervision and guidance received, the economic conditions and the educational status of parents, all affect the behaviour of children. For instance, the development of bullying is not simply dependent on the characteristics of the individual; rather, it is influenced by multiple relationships with peers, families, teachers, neighbours, and the like (Swearer & Hymel, 2015). Soon after children start interacting with their peers and the neighbourhood, they begin to acquire skills, knowledge and attitudes that contribute to the development of the personality of individuals in general and behaviours in particular. These interactions in general have an effect on the emotional and behavioural patterns of individuals. Consequently, a large number of adolescents suffer from emotional and behavioural problems the root cause of which was their family environment (Pathak et al., 2011).

The non-home environment covers a broader scope, such as the school and school environment, the community, society at large, including the mass media and the like. The increases in age and development of the individuals further facilitate more favourable conditions to expand the scope of interaction with the community and the society. These in turn have diversified the effect on the development of emotional, behavioural and socio-emotional aspects of individuals.

Individual behaviour is not solely governed by environmental and the biological influences. Human beings have the capacities of perception, sensations, analysing, organising, thinking, solving problems and the like. In addition, the need for an individual to demonstrate their own creativity or uniqueness is a factor, according to the cognitive and humanistic theorists (Plotnik & Kouyoumdjian, 2011). It is the way by which people think and decide that influences individuals on how to behave, besides other related factors. The interaction between culturally dependent social



roles and different individual role identities plays dominant roles in governing the behaviour of individuals (Matsumoto, 2007).

To summarise, the development of individuals is affected and shaped by the types of living conditions and the interaction of the individuals with their biological endowments. Adolescence is a period that is emotionally and biologically challenging with changes in endocrine levels and changes in the environment that may ultimately bring about change in the inherited traits in individuals (Bartels, van de Aa, Beijsterveldt, Middeldorp, & Boomsma, 2011). Furthermore, adolescents are engaged in risk taking behaviours because of biological factors that are supposed to influence risk taking behaviours through genetic predispositions, direct hormonal influences, the influence of asynchronous pubertal timing (i.e., earlier or later timing than peers), and brain development (Sales & Irwin, 2013). Furthermore, adolescents' risk-taking behaviours may be due to societal influences including mass media and community norms and cultural practices, such as unprotected sexual behaviour and alcohol/substance use and the like (Ibid).

As a matter of chance, different issues are playing prominent roles in determining and influencing the emotion and behavioural development of adolescents. This could be categories such as biological, environmental, and the self or individual himself/herself. The interplay of these three broad categories is largely responsible for influencing the development of desirable or undesirable forms of emotions and behaviours. The individual needs the biological aspects as well as the home and non-home environments which are interwoven as indicated and presented in Figures 2.1 and 2.2. Subsequently, if the interaction of these factors is harmonious, then the life experience of the individual will be more harmonious and will exhibit less deviant behaviours. On the other hand, the failure to harmonise the different aspects of their development into positive "patterns" may result in individuals' emotions and behaviours causing them to deviating from what is regarded as the normal which will result in problematic behaviours.

## 2.4 SUMMARY

In this chapter, the main theories of human developmental processes and their useful application to human development in general, and what could affect human development in particular, have been discussed.

- Ecological development theory emphasises that the family, the neighbouring, the peers, schooling, school environments and practice as well as experiences of the community play directly or indirectly great roles in the development of health or maladjusted behaviours. Besides, the extent to which adolescents engage in problematic behaviour with peers and the reaction of their parents towards that behaviour conversely have contribution the adolescents to engage in problematic behaviours in the future (Taylor et al., 2000). In general, factors related to parents/guardians, school and social contexts which are expected to be great contributors for the development of emotional and behavioural problems of adolescents.
- Biological factors theory of human development deals on how change in biological factors, like the development of the neural system/brain, and different hormones and endocrine system according to the biological blueprint brings about radical changes in different aspect of development of adolescents.
- Bio-ecological model of human development theory is focus on the interaction of individual and environment. Environment of an individual (cultural and socio-political environment) greatly influence of on the development of individual while the individual also affect his environment (Suarez-Balcazar et al., 2014). The ecological system by which an individual expected to develop and function is categorised as microsystem, mesosystem, exosystem, macarosystem and chronosystem (Melchert, 2015).

A summarised model of the conceptual framework views suggests that three phenomena: the self, the environmental (home and non-home) and biological factors of an individual are predominantly responsible for all forms of human development—normal or deviant.

To sum up, the model based on the 3 theories discussed are expected to make an important contribution to comprehensively understand how human beings develop throughout their life time. Moreover, they provide solid and inclusive alternatives and explanations for the escalating of different emotional and behavioural problems. In short, unhealthy living environments may affect the normal developed of individuals. On the other hand, an unhealthy individual also affects the environment. Overall, this is a brief summary of the model based on those theoretical frameworks discussed above in the chapter.

The next part of the thesis, Chapter three, presents the review of related literature. The foremost concern of the review was to survey and assess the work of other researchers and scholars in relation to the research problem.

## **CHAPTER THREE**

### **REVIEW OF RELATED LITERATURE**

#### **3.1 INTRODUCTION**

In the previous part of the study, in Chapter two, some major underlying theories associated with human development and the related theoretical frameworks, were presented. Some general aspects of human development, which do affect the development of individuals positively or negatively, are reviewed and presented in this chapter (Chapter Three) from different perspectives. In this regard, overviews of aspects of development: physical, cognitive, psychosocial and moral, are provided. Finally, the prevalence of emotional and behavioural problems of school adolescents as well as types of emotional and behavioural problems and internalising and externalising problems is addressed.

#### **3.2 OVERVIEW**

Adolescence is a significant period during which an individual undergoes transition from childhood to adulthood. Likewise, it is the most important and significant transformation in the human lifespan by far (Hauser-Cram, Nugent, Thies & Travers, 2014). Furthermore, during adolescence, individuals' cognitive, psychosocial and emotional development progresses and advances more than at any other period of development (Sanders, 2013). Adolescence is also characterised by rapid physical, muscular, hormonal and behavioural changes of which more qualitatively as well as quantitatively changes. While adolescence is a period of healthier practices for the majority of adolescents, in contrast some of them experience health, social and academic challenges (Waters, Cross & Runions, 2009). During adolescence more interaction with peers as well as relying on them for information occurs a great deal, while dependence on parents and families declines. In short, adolescence comprises the periods during which prominent as well remarkable physical, psychological and behavioural changes are emerging and intensifying (WHO, 2017). During this period, the interaction with both the physical and social environment is increased. The expectation of the society towards adolescents is also likely to be high.

There are diverse approaches and views that promote understanding of and explain adolescence and adolescents, differently. Regarding the prevalence of emotional and behavioural problems, various theories use different ways to study and explain the sources as well. Here, attempts will be made to describe some of the developmental aspects of adolescents that include the various characteristics of their development; the ecological factor, biological factor and bio-ecological human developmental theories are discussed. In addition, the prevalence and types of emotional and behavioural problems of adolescents are discussed in this chapter.

### **3.3 ASPECTS OF DEVELOPMENT**

The four main areas of human development include physical, cognitive, psychosocial and moral development. These aspects with regard to adolescents are briefly discussed here. Of course, areas of human development are not merely limited to those mentioned here, however in this study; just the four areas of development mentioned above are addressed as the key interest in this study is the stage of human development known as adolescence. Not all teenagers enter and exit adolescence at the same age or display same behaviours. What is more, throughout much of adolescence, a youngster can be further along in some areas of development than in others. For example, a fifteen-year-old girl may physically resemble a young adult but she may still act very much like a child since it is not until late adolescence that intellectual, emotional and social development begin to catch up with physical development.

#### **3.3.1 Physical development**

As stated previously, adolescence is the time during which radical changes and development emerge and advance. These changes begin with the biological changes of puberty, which imply the end of childhood. The pubertal period is characterised by growth spurts in height and weight and sexual maturation. These developments affect all skeletal and muscular dimensions (Papalia, Feldman & Olds, 2004). Furthermore, Ruffi (2009) concurs that major physical changes during

adolescence are those of rapid increases in height and weight, secondary sex characteristics and continual brain development.

Santrock (2006) stressed the physical changes that take place during adolescence particularly in puberty, are dramatic and cause rapid physical maturation involving hormonal and bodily change, adolescent sexuality, and the brain. Connected to this, McNeely & Blanchard (2009) argue that the most significant physical changes that are dominantly observed during the ages of 10 to 14 are the alteration in hormonal levels, brain development, and full physical development for girls and close to full physical development for males. The brain structure and functioning, the muscular and glandular and hormonal developments are close to that of adults. Nevertheless, the connections between neurons affecting emotional, physical, and mental abilities are incomplete during adolescence, creating some inconsistency in controlling emotions; especially if it is compared to the brain development of adults which is responsible for controlling emotion and other related aspects (Ruffi, 2009).

Commonly, young people reach the maximum potential of their fitness, physical strength and reproductive capacity during the pubertal period and the brain develops during early adolescence too (Viner, 2012). Therefore, this implies that during adolescence, maximum physical changes are to be expected, and these will be maintained more than in any other periods in a human being's developmental history, except probably in the time of infancy. Accordingly, these rapid physical changes, which affect the brain also, lead to expectations that adolescents will behave and act differently from the previous period of development. If these changes during adolescence do not fit society's expectations and the roles that it expects of adolescents, this may lead to certain complications in the life of the latter. This in turn may cause them to be challenged and influenced by the environment. The result might be distressing or joyful – if they are able to successfully overcome the environmental pressures.

### 3.3.2 Cognitive development

Cognitive development is considered as a series of long-term changes in the processes of thinking and memory processes (Seifert & Sutton, 2009), which include such accomplishments as the abilities of: attending, perceiving, learning, thinking, remembering, analysing, problem solving abilities and so forth, as related to the age of an individual (Shaffer & Kipp, 2010). To put it another way, adolescence is a period during which the cognitive abilities and capabilities are developed and advanced. Piaget (1929), in his cognitive development theory, referred to this stage as the formal operational stage. This implies that adolescents think logically, systematically and are able to solve abstract problems or understand abstract concepts in a manner similar to that of adults. In other way the quality of teenagers' thinking increases as a result of the spurt in the growth of the parietal and frontal lobes in the brain, as well as besides subcortical regions (Dacaye & Travers, 2009).

Therefore, during the period of adolescence, the individual's ability to think in logical order and the ability to using abstract thinking is heightened as is the ability to solve problems. The use of language, and so forth, is more advanced and well developed than the previous stages. In addition, risk taking behaviours as well as adventurism advance more at this time than during the other developmental periods. In short, during the period of adolescence, these young people develop more enlightened reasoning skills, an ability to think abstractly and meta-cognition (Sanders, 2013). Furthermore, adolescence is the time of imaginary audience, holding beliefs about their uniqueness and vulnerability, and a time of critical thinking (Dacaye & Travers, 2009).

The emergence of cognitive thinking abilities of adolescents has a tendency to lead them to begin questioning and testing of many issues. For example, what if students come late in the classroom, come without completing homework to the class or else searching for what are the short cut and the like. This type of thinking and these behavioural tendencies probably create a certain amount of conflict with adults. The consequence of these disagreements might matter for healthier mental development of the adolescent.

### **3.3.3 Psychosocial development**

The psychosocial development of individuals during the adolescent period is characterised by a growing sense of autonomy, the foundation of identity, and future orientation (Sanders, 2013). Adolescence is an important and magnificent transitional period for social and emotional development; however, it is full of risk and is a problematic time too (Connell, 2009). Numerous investigations have confirmed that adolescents engage in more risky behaviours than adults in certain areas, since they experience more emotional satisfaction with adventuresome behaviour, according to neuroimaging studies (Sanders, 2013). This is because the behavioural practices in searching for identity in themselves are challenging. The conflicts that arise from the internal needs of the individual as well as the pressure of the community prescribing how adolescents should be and what they should accomplish during this developmental period makes the situation even more challenging for them.

In this connection Erikson (1963) argued that adolescents are challenged by crises that they are expected to resolve. While struggling with the formation of their identity, some adolescents who are unable to resolve the crises positively engage in role confusion or identity confusion. Adolescents who are unsuccessful in meeting society's behavioural expectations may also experience negative consequences in other tasks, which might lay a foundation for the development of problems and psychopathology, whereas success results in a sense of mastery, self-esteem, social inclusion, well-being, and resilience (Melchert, 2015). Actually, adolescence is an ideal time of learning and adjustment (Crone & Dahl, 2012). However, if her or his internal needs and the expectations of the community are not positively resolved, this may push a teenager toward confusion that could be a contributor to the emerging and escalation of emotional and behavioural problems.

Every earlier psychosocial developmental stage contributes a superior advantage for the development of identity formation or identity/role confusion, but this process reaches its peak during the stage of identity versus identity confusion, which results from physiological changes and newly emergent sexual desires along with social



pressures and others different views (Miller, 2011). These pressures may exacerbate adolescents' emotional and behavioural problems. Of course, most adolescents peacefully manage the situations very successfully, resulting in the positive development of identity formation; while, according to Erikson (1963), failure to do so may lead adolescents to identity confusion. Identity/role confusion may predispose the adolescents to developing the said problems.

Furthermore, the radical change brought about by the commencement of puberty, with the combination of the development of advanced intellectual capabilities may confuse adolescents in their efforts to appropriately locate themselves in their society. This in turn may create adjustment problems or bring about identity crises for them (Richard, 2005). Overall, it can be said that numerous factors, such as individual issues, family, school or neighbourhoods can influence the psychosocial welfare of both children and adolescents which may affect their capabilities of reaching their optimum potential (Servili, 2012).

#### **3.3.4 Moral development**

One of the aspects of human development is moral development. Morality is described by psychologists and educationalists as beliefs of individuals about what is right and what is wrong, what is desirable and what is undesirable, what is correct and what is incorrect. For instance, Seifert and Sutton (2009) have explained that moral development refers to the change in the belief system of an individual about what is right and good compared to what is wrong or bad. During adolescence, the socio-cognitive skills as well as affective responses are significantly improved and changed; as a result moral reasoning and altruistic predispositions are fostered; in turn, moral development and cognition as well as behaviours of adolescents are expected to enhanced grow (Eisenberg, & Morris, 2004). Nevertheless, moral development during adolescence seems underdeveloped and this could be challenging for adolescents to cope with in their environment due to societal expectations. For instance, since they are supposed to transfer to large school community new challenges concerning their moral life and practices as well as opportunities and new influences will impact on adolescents, as will new friendships

(Hart & Carlo, 2005). In addition, adolescents will have to experience and confront many multifaceted social circumstances such as peer pressures and the challenges of group membership and social norms (Cooley, Elenbaas & Killen, 2012).

In general, it appears that all these factors, including the multiple contexts of home, school, neighbourhood work and the various agents of influence, such as biological, family, peers and media impact on the moral development of adolescents (Hart & Carlo, 2005) and perform significant roles in the said development. In this regard, adolescents who are able to positively resolve these multifaceted social challenges will develop a stronger and socially well accepted moral behaviours and beliefs system. If adolescents encounter the opposite (negative experiences) they may fail to find social acceptance or might become socially excluded. As a result, these problems may cause confusion about the self and inhibit social adjustment, which in turn, may affect the individual's functioning capabilities or performance characteristics. Of course, these types of challenges or social exclusions provide room for adolescents to develop different perceptions of how to integrate emotionally and morally in the context of social exclusion conditions (Cooley et al., 2012).

### **3.4 PREVALENCE OF EMOTIONAL AND BEHAVIOURAL PROBLEMS OF SCHOOL ADOLESCENTS**

The prevalence of emotional and behavioural problems of adolescents in school is expected to be vary from country to country based on various factors: cultural backgrounds, economic development and other conditions may be the contributing factors. The said prevalence is reviewed briefly in the subsequent few paragraphs.

A longitudinal study conducted by Wang et al. (2013) on 5220 Chinese adolescents aged 11–18 from 30 public schools revealed that the overall prevalence of emotional and behavioural problems was found to be 10.7%. They concluded that the prevalence of emotional and behavioural problems of adolescents in China is relatively lower in comparison to other countries described in the literature. For instance, Reijneveld et al. (2014) in their study of adolescents aged 10-19 years old predicted that the percentage of adolescents with behavioural and emotional

problems would range from 10% to 25%. Adolescents' major problems are related to substance use, health and related issues (Santröck, 2006) such practices are however generally associated with emotional and behavioural problems.

On the other hand, the research survey administered to 20,855 secondary school adolescents by Plüddemann et al. (2014) in the Western Cape Province of South Africa, illustrated that about 15% of adolescents were grouped as having a high risk of mental problems. Moreover, Kleintjes, Lund and Flisher (2010) conducted an investigation in four African countries - Ghana, Uganda, South Africa and Zambia - which produced evidence that about 20% of children and adolescents were suffering from mental disorders. Research by Flisher et al., (2012) produced similar findings and explanations. Furthermore, the analysis by Saleem and Mahmood (2013) of the prevalence of emotional and behavioural problems of 5053 school children aged 13-17 years, using the SCPS scale, by taking into account the 90<sup>th</sup> percentile as a cut-off point, discovered that 21% of children in India, were categorised as having severe emotional and behavioural problems. Likewise, in a study on the emotional and behavioural problems of Algerian adolescents, Petot, Petot and Achenbach (2008) identified differing prevalence rates with regard to gender variations between females and males. The girls showed significantly higher scores than boys on withdrawn, somatic complaints, and the anxious/depressed syndrome, whereas boys recorded higher scores on attention problems and delinquent behaviour.

In general, the above research findings demonstrate that there are variations of the prevalence of emotional and behavioural problems amongst adolescents of different countries. Findings also revealed that this prevalence is believed to be extensive and pervasive. As a concluding remark, it was demonstrated that children of 4 to 17 years displayed more prevalence of emotional and behavioural problems (Pastor, Reuben & Duran, 2014).

### **3.5 TYPES OF EMOTIONAL AND BEHAVIOURAL PROBLEMS**

The most common emotional and behavioural problems that could prevent a child from functioning optimally in a school setting are such issues as anxiety/depression,

attention deficit/hyperactivity disorder (ADHD), aggression, attachment disorders, conduct problems, delinquency and bullying and the like (Evan, Williams, Schultz, & Weist, 2004). Below, some commonly observed problems of school adolescents are addressed.

### **3.5.1 Anxiety/depression**

It has been established that anxiety and depression are considered to be common mental health problems extensively found in both childhood and adolescence (Karevold, 2008). Depression is a commonly unrecognised crucial problem of adolescents that requires more effort in identification and intervention at the middle school levels (Saluja, Iachan, Scheidt, Overpeck, Sun & Giedd, 2004). Children with mental health problems such as anxiety and depression are often first identified and treated in the education, social service or juvenile justice systems. Even if many problems of youth are identified in the education sector these may not be recorded as mental health problems (WHO, 2005). School children might develop anxiety in reaction to persistent stressful events or situations; however, when it lasts for a long time, it affects the functioning abilities of children (PACER Center, 2006). Anxiety constitutes the most common of the internalised problems in childhood and adolescence and is often not recognised or properly reported by both parents and teachers (Rodgers & Dunsmuir, 2015). Depression can be characterised by or expressed in the form of sadness, feelings of worthlessness, feelings of guilt, social withdrawal and loss of sleep, loss of appetite or interest in activities; and if depression is intense it may result in difficulty in sitting still and inattention, while a sense of hopelessness and anxiety might even emerge (Sharf, 2012).

According to (Hamlat, Stange, Abramson & Alloy, 2014), research findings revealed that in the US, about 8% of adolescents (from 12-17 years) experienced major depressive incidents that ranged from moderate to severe depression and which lasted at least two weeks. They found that early maturation, especially for girls, was one of the reasons for the development of depression in adolescents. On the other hand, Costello, Egger, Copeland, Erkanli and Angold (2011) in their meta-analysis of

26 studies of adolescents aged 13 through 18, determined that the prevalence of anxiety disorder in this age group was found to be 10.0%.

### **3.5.2 Social withdrawal/rejection**

An individual's ability to appropriately engage in interpersonal interaction in a flexible and goal-directed manner is the foremost important constituent of psychological wellbeing (Girarda, Wrighta, Beeneyb, Lazarusb, Scottb, Steppb & Pilkonisb, 2017). This implies that if individuals are lacking in the ability to establish good and desirable interpersonal interaction or social skills, they might be exposed to different psychological problems such as social withdrawal.

Adolescence is recognised as an important time for the development of strong peer relationships. However, if the peer relationships are not significantly helpful to the adolescent, especially while engaged in difficulties the outcome of which is social isolation, this may escalate the adolescents' vulnerability so that it results in undesirable psychosocial consequences (Hall-Lande et al., 2007). Social rejection or withdrawal is the feeling of individuals' exclusion of themselves from others. Socially withdrawn children typically spend their time playing alone, especially in a place where they are out of sight of others (Rubin, Bowker, Booth-LaForce, Rose-Krasnor & Laursen, 2007).

Socially withdrawn children and adolescents have the tendency to interact with their peers; nevertheless they are anxious and socially fearful to engage in social interaction, according to approach and avoidance models of social withdrawal besides unsociability: lack of interest in their peers or avoidance (Bowker & Raja, 2011). Accordingly, social withdrawal is a type of deficiency in social competence skills – an essential constituent for social behaviours that determine the individuals' interpersonal relationships (Zach, Yazdi-Ugav & Zeev, 2016).

Social relationships during adolescence are an important phenomenon that assists teenagers to acquire and develop the major social skills and practices of life. These relationships provide them with the important sources of social support from the

social groups (Vaquera & Kao, 2008). Moreover, social interaction and socialisation experiences are apparently a significant part of life for all animals as well as for human beings of different age groups. In this regard, most adolescents are able to sustain social/peer relationships appropriately; however, there are a few who fail to establish and maintain a good relationship with others. As a result they prefer to be socially inaccessible (Nino, Ignatow & Cai, 2017). The social problems of adolescents are an important subject that needs to be considered since many adolescents may be challenged with these problems. Social withdrawal is considered to be a behavioural difficulty for either adolescents or adults and is associated with problems in experiencing different forms of societal contacts and withdrawal from all social activities (Suwa & Suzuki, 2013).

Socially withdrawn behaviour in childhood as well as in adolescence is concomitantly and predictively a risk for extensive maladjustments such as socio-emotional difficulties (anxiety, low self-esteem, depressive symptoms, and internalising problems), peer difficulties (rejection, victimisation, poor friendship quality) and school difficulties (poor teacher-child relationships, academic difficulties, school avoidance), (Rubin, Coplan & Bowker, 2009). In addition to the above risks, social isolation can be considered as one form of withdrawal connected with advanced risk for depressive symptoms, suicide attempts and low self-esteem (Hall-Lande et al., 2007). These types of practices or behaviours, in one way or the other, will inevitably hamper the academic performance of adolescents. Since the educational system itself is a social phenomenon, it might even harm the individual's intra- and inter-personal communication skills as well as being responsible for other harmful practices.

Social or peer relationships provide many compensations for adolescents, but in contrast, social withdrawal has an undesirable influence on the psychological makeup and well-being of adolescents. For instance, close peer relationships facilitate group partnerships, which in turn, provide psychological support as well as being a comfort to them as they develop a sense of belonging by diminishing a sense of loneliness, even while they are challenged with diverse difficulties (Hall-Lande, et al., 2007). Likewise, adolescents who enjoy strong and constructive

relationships with their peers as well as those who are acknowledged by their peers are enabled to develop helpful relationships that could sustain success in their social, emotional and academic lives (Rubin, Bowker, & Gazelle, 2010).

Therefore, in short: adolescents who have strong social relationships and who are highly connected with their peers will increase their emotional well-being, while on the other hand, social isolation or withdrawal has negative outcomes on the emotional well-being of adolescents. The latter is of course, a painful emotional experience, particularly for adolescents, those who are engaged in social withdrawal (Hall-Lande, Eisenberg, Christenson & Neumark-Sztainer, 2007); moreover, social isolation has a considerable association with inferior levels of self-esteem and higher levels of depression as indicated, in male as well as in female adolescents (ibid).

Furthermore, socially withdrawn behaviours in children commonly manifest by them discontinuing activities in which they had previously engaged in with peers (Rubin, Coplan & Bowker, 2009). In addition, social withdrawal problems, particularly during adolescence, could be difficult for individuals in adjusting to the social environment. As mentioned, most human beings are social animals, and the socialisation helps an individual to keep life relatively simple. She or he will benefit more from the social groups through appropriate interaction and maintaining social relationships. For instance different life skills, such as speaking and communicating with others, as well as working with others, are important aspects of life that could be acquired from socialisation processes.

To sum up, those young adolescents who are characterised by withdrawal are at risk of experiencing peer rejection, exclusion and victimisation (Bowker & Raja, 2011). Of course, it seems easier to depict the effect on the normal functioning potential of individuals who experienced a sense of rejection or victimisation. Social withdrawal during adolescence has a tendency to expose adolescents to risky behaviours such as developing of depression, poor self-esteem etcetera. Consequently, the concept of social withdrawal problems during adolescence is an important issue that needs to be addressed because significant numbers of adolescents are suffering from social withdrawal: for instance Hall-Lande et al. (2007) argued that social withdrawal

accounts for about 8% of the population, of this about 6% are girls and 10% are boys. Besides, if those adolescents suffering from social withdrawal are not helped to be fully functional in connecting with their peers and the community, it is not difficult to infer the most likely effects and impacts on the mental health, functioning and even the life goal of an individual.

### **3.5.3 Aggression/bullying behaviours**

Aggression/bullying is described as the act of intentional and repetitive harm to peers (Furlong, Soliz, Simental & Greif, 2004; Tillotson, 2008). To be more specific, bullying may be expressed as: harassment, hitting, kicking, isolating, humiliating and teasing (others) (Forlin & Chambers, 2003). Bullying is exemplified either by direct acts such as name calling, physical aggression, threats, hurtful words or displaying unpleasant faces and gestures that disturb the victims or, indirect acts like ignoring, isolation and defamation (Neto, 2005).

Aggressive behaviours are acts either intentional or unintentional, such as temper tantrums, physical aggression: hitting or biting others, stealing, and defiance of authority or parents (Zahrt, & Melzer-Lange, 2011). Other behavioural problems are: repetitive, outward, inappropriate behaviours that go against the rights of others or bullying, violence, physical or psychological abuse of others. In a study by PACER Center (2006) these accounted for 6% to 16% of boys and 2% to 9% of females. In the same way, in the study of schoolgoing adolescents the rate of behavioural problems was 11.8% (Pathak, Sharma et al., 2011). In findings contrary to the above study, Zahrt and Melzer-Lange, (2011) suggested that approximately 3% to 7% of children and adolescents were manifesting signs of aggressive behaviours. Similarly, a study on the prevalence of aggression in children suggested ranges of 10% to 20% (Tillotson, 2008). Despite the variations in the percentages of the manifestation of the prevalence of aggression from diverse studies, it is valuable to see it from two perspectives. In one way or the other, it can be generalised that aggressive behaviours in school going children are not considered to be minor problems. Moreover, it demands that these problems are critically viewed because they have



adverse effects on the social as well as academic competences of the individuals: both the aggressor and the victim.

#### **3.5.4 Attention deficit hyperactivity disorder (ADHD)**

Attention Deficit Hyperactivity Disorder (ADHD) refers to the inability to be focused, to concentrate or pay attention for a relatively long period of time; in other words it refers to being easily distracted and impulsivity. Likewise, ADHD is characterised by inattentiveness, over activity, and impulse control problems (Tillotson, 2008). Similarly, it is identified by deviant and disruptive behaviours, anxiety, and some forms of learning disabilities (Agency for Healthcare Research and Quality, 2012).

Attention Deficit Hyperactivity Disorder is a widespread childhood brain disorder that may continue through adolescence (*Mental Health of National institute, 2012*) and accounts for 3% to 7% of children in the United States (Tillotson, 2008). Attention Deficit Hyperactivity Disorder problems appear in 3% to 5% of children (PACER Center, 2006), while other studies suggest that recent research findings report that the prevalence is from 5% to 7%. These figures are supported by the AHRQ (2012). Similarly, the projection of a universal prevalence rate of ADHD through an analysis of 103 studies was 5.29%, revealing large discrepancies amongst the different countries (Willcutt, 2012).

Of those adolescents with ADHD, almost about 70% to 80% have significant difficulties with various aspects of academic, social and other related aspects (Ellison, 2004). Consequently, in this regard, giving more attention to children (including adolescents) with ADHD in association with school activities is an indisputable and critical issue.

#### **3.5.5 Academic problems**

Some school adolescents encounter problems with academic performance and suffer from undesirable behaviours, the sources of which can be viewed from various perspectives by different professionals (McWhinney, 1986). One of the causes that

might adversely influence the academic performance of adolescents could be attributed to emotional and behavioural problems. According to Xia, Fosco, and Feinberg (2015) adolescents with problems of this kind had a tendency to academic performance difficulties that could be manifested in the form of school failure, withdrawal and disagreement with their colleagues and parents; even with their school teachers.

It is believed that behavioural and academic problems have reciprocal effects on one another; in the long run they negatively influence the development of an individual and in turn, the person's environment. For instance, besides externalising and internalising behavioural problems, good social relations are associated with academic achievement (Barriga, Doran, Newell, Morrison, Barbetti & Robbins, 2002). In addition, the school competence as well as the learning ability of those adolescents who are suffering from mental health problems i.e. emotional and behavioural problems, was found to be lower than that of the so-called normal age groups (McLeod et al., 2012). Furthermore, they clarified that different research findings argued that adolescents with mental health problems achieve academic performances at levels lower than that of their peers (ibid).

Academic problems are also one of the most frequently studied areas, resulting from concern over the social consequences of mental health problems. However, social consequences of mental health problems do not certainly reduce the functional ability of individuals; rather, they denote negative social responses (McLeod et al., 2012). Cultural and psychological anthropologists have for many years asserted that humankind shares a fundamental psychic unity while simultaneously endorsing the notion of cultural relativism, with its claim that belief systems, attitude, perceptions, feelings and behaviours tend to differ radically from one society to a next (Gielen & Roopnarine, 2016). There have been numerous research findings about the relationship between behaviours and academic achievement in the broad spectrum, in western culture. Nevertheless, in China, this notion has disproved that students with problematic behaviours performed their academic performance well, and they have justified that due to the toughness of the education system of China that may be encouraged students engaged in problematic problems just to get relaxation/to be

free from pressure (Li & Armstrong, 2009). Conversely, research findings have shown that attention problems, delinquency behaviours, and substance use in particular, have revealed strong associations with a decline in the academic achievement of students, while depression was nothing to do with academic achievement of students (McLeod et al., 2012). Furthermore, other research findings, such as those by Dirks, Persramb, Recchia and Howe (2015) indicated that the relationship between lower academic achievement and behavioural problems of children and adolescents is related to externalising behavioural problems.

It is most likely that academic problems are associated with or classified as problems of social competence or adaptive/functioning problems. Nevertheless, as indicated above, academic difficulties have some sort of link or association with behavioural or/and emotional problems. Hence, examining this from the emotional and behavioural perspectives is important.

### **3.5.6 Somatic disorders**

The symptoms of somatic disorders are considerably stressful in all day-to-day life experiences and are associated with excessive thoughts, feelings or behaviours of individuals (*American Psychological Association, 2013*). A somatic disorder is a type of pain that is not medically explained as well as the persons presenting difficulty in understanding and expressing the feelings of their pain (Kenny & Egan, 2011). Put in other way, somatoform disorders or complaints are associated with psychological problems that have physiological symptoms, although no real physical problems were medically diagnosed or recognised (McEntarffer & Weseley, 2012; Sharf, 2012). Somatic complaints may involve symptoms such as headaches, stomach aches or muscle pain (Hart, Hodgkinson, Belcher, Hyman & Cooley-Strickland, 2013).

A substantial number of children and adolescents as well as adults complain of somatic issues that cannot be verified by medical causes; however the pervasiveness rate is anticipated to be significant concern (Vulić-Prtorić, 2016). Parents with a history of illness and focus on somatic complaints will be a model for

their children to be illness-focused (McEntarffer & Weseley, 2012). The percentage of somatic disorder observed in teenagers and young adolescents accounts for 0.2% to 2% of women and less than 0.2% for males (Khouzam & Field, 1999). This projection of the prevalence rate seems almost in contradiction to many research findings as mentioned above. For instance, the prevalence was 10% of teenagers that were reported with different symptoms of somatic complaints (Mohapatra, Deo, Stapathy & Rath, 2014).

The symptoms may be activated and intensified by home pressure on adolescents; especially pressure related to high academic aspirations of parents for their children without considering the children's abilities (Luciana & Rani, 2012). In addition, it is supposed that somatic symptoms are closely associated with the physical responses to stress and illness (Hart et al., 2013). Somatic complaints are one component of emotional and behavioural problems. As indicated above, few adolescents were suffering with somatic complaints that could not be medically diagnosed and treated.

### **3.5.7 Oppositional defiant behaviours**

Adolescents with oppositional defiant behavioural disorder exhibit intentionally uncooperative and hostile behaviours regularly and consistently, in comparison to their age groups and developmental levels. This in turn affects the social, family and academic life of individuals (American Academy of Child and Adolescent Psychiatry, 2013).

Children with such a disorder tend to break rules at school, become bad tempered easily, blame others for their faults, argue with authority and adults and demonstrate extreme anger (Zahrt & Melzer-Lange, 2011; Kelty Mental Health Resource Centre, 2012). This disorder is said to be oppositional and defiant because children with it are likely to disturb others who are around them (American Academy of Child and Adolescent Psychiatry, 2009). Furthermore, research findings reveal the prevalence of oppositional defiant disorder amongst school age children and adolescents to be 1 to 16% (American Academy of Child and Adolescent Psychiatry, 2013).

Essentially, this disorder appears related to other forms of emotional and behavioural problems, such as rule breaking and aggression. Whatever the classification, it affects the social relations of individuals and interpersonal relations, which in turn, may negatively affect some functional aspects (working with peers, working on group tasks and lack of being friendly to the environment).

### **3.5.8 Conduct disorder and rule breaking behaviours**

Conduct problems in adolescents have significantly increased in the last decades, affecting all groups of people, including all family types (Collishaw, Maughan & Goodman, 2004). Adolescents who have conduct disorders are experiencing excessive difficulty in following rules and acting in a socially acceptable fashion, as well as being considered by others as a delinquent (American Academy of Child and Adolescent Psychiatry, 2013; Collishaw et al., 2004). If adolescents with conduct disorder are not given treatment, many of them are unable to adjust to their social environment: this in turn, leads them to face many difficulties with respect to social relationships and holding jobs, since this persists into their adult life too (American Academy of Child and Adolescent Psychiatry, 2013).

Adolescents with conduct disorder evidence behaviours that disrupt the rights of other individuals' or violate the norms and rules of society (Children's Mental Health Ontario, 2001; Adeusi, Gesinde, Alao, Adejumo & Adekeye, 2015). In addition, adolescents with conduct disorder may be dominantly characterised by aggression to people and animals, destruction of property, deceitfulness and serious violations of rules (Zahrt & Melzer-Lange, 2011; American Academy of Child and Adolescent Psychiatry, 2013; Frick, 2016).

To sum up, conduct problems encompass antisocial behaviours and affect the functioning of individuals from social and psychological dimension as well as their life in particular (Waddell, Wong, Hua, & Godderis, 2004). Therefore, since problems of this type affect the individual's functioning or social competence skills, in certain respects she or he is at a disadvantage. Consequently, paying attention to these problems is one of the important dimensions in this regard.

### **3.5.9 Internalising and externalising behavioural problems**

Emotional and behavioural problems could be issues that might affect the normal functioning abilities of individuals. Such problems are classified in two broad categories or disorders that comprise internalising problems (such as anxiety, depression and fearfulness) and externalising problems (such as aggression, destructive behaviours and hyperactivity) (Dearing, McCartney & Taylor, 2006).

In general, as noted, internalising and externalising problems are the two broadest subcategories of emotional and behavioural problems. Internalising as well as externalising problems are reviewed and explained here, each in turn.

#### *3.5.9.1 Internalising behavioural problems*

Internalising problems are categorised under the subcategories of psychopathology that encompass emotional and mood disturbances (Graber, 2004). Internalising behavioural problems is associated with inward/over-controlled children's and adolescents' behaviours of anxiety/depression, withdrawal/depression and somatic complaints (Achenbach, & Rescorla, 2001; see also Zahn-Waxler et al. 2000) and Achenbach, Dumenci & Rescorla, 2002).

Overall, internalising behavioural problems are associated with inward behaviours of individuals. Of course, as indicated above, different scholars understand and explain these in different ways. In short, internalising problems are most likely subtle and covert behaviours (Wilmshurst, 2013).

Additionally, their prevalence also varies between genders; for instance it was indicated that in India statistically significant variation were observed between males and females in both depression and social isolation where girls reported a higher proportion than boys in both variables (Tiwari & Ruhela, 2012).

### 3.5.9.2 *Externalising behavioural problems*

Externalising problems are categorised under the subdivisions of psychopathology that refer to failure to regulate behaviours of the self (Graber, 2004). Above and beyond, Zahn–Waxler, et al., (2000) confirmed that externalising problems are characterised by hurtful and troublesome behaviours and practices towards other people. Furthermore, externalising behavioural problems are problems that are associated with children's outward behaviours like rule-breaking, aggression and delinquency behaviours (Symeou & Georgiou, 2017). Likewise, externalising behavioural problems involves rule-breaking behaviours and aggression behaviours, in turn, it encompass the sum total of each of these two sub scales items (Achenbach & Rescorla, 2001). On the other hand, aggressive behaviours and delinquent behaviours are considered components of externalising behavioural problems (Bongers, Koot, Ende & Verhulst, 2002).

Externalising behaviours are exhibited and characterised by outward behavioural problems such as aggressiveness, violence, and insistent behaviours (Busari, 2014). Congruent with this, Symeou and Georgiou (2017) asserted that externalising behavioural problems are characterised by outward behaviours, such as rule-breaking, aggression and delinquency.

To sum up, externalising behavioural problems are associated with outward behaviours of individuals. Such problems basically include rule-breaking and aggressive behaviours. These behaviours are directed to others. In other ways, mostly they deal with attacking, disturbing and harming others either physically or psychologically. In this regards, males' scores exceed females scores (Bongers, Koot, Ende & Verhulst, 2002).

## **3.6 CONCLUSION**

This chapter deals with aspects of human development with regard to the emotional and behavioural problems of adolescents. In addition, it encompasses and discusses types/ components of the said problems. Furthermore, the prevalence of such

problems was widely confirmed. In addition, internalising and externalising problems of adolescents were described too.

The next chapter of this study is Chapter four. It focuses on the research design and methods that are used to go through the investigation processes to obtain responses for the posed research questions and the research hypotheses stated in the first chapter of the study. Specifically, this chapter includes the research methods, population and sampling, data analysis and ethical considerations needed to conduct the research.



## **CHAPTER FOUR**

### **RESEARCH DESIGN AND METHODS**

#### **4.1 INTRODUCTION**

Chapter one deals with the orientation and background of the study. Chapter two discusses the major theoretical frameworks of the study that could be considered as an explanation of the major problems associated with the matter under investigation. Chapter three also presented a review of related literature that is relevant to the study, in which it focused on aspects of human development, emotional and behavioural problems of adolescents, types of these problems and their prevalence as well as the internalising and externalising behavioural problems of adolescents.

This chapter describes the research design, the methods and processes that were used in conducting the study. Accordingly, data collection instruments and procedures, population and sampling, validity and reliability, data analysis techniques, ethical considerations are the core elements of the chapter.

#### **4.2 RESEARCH PROBLEM**

The study addresses the prevalence of emotional and behavioural problems and their pitfalls among secondary school adolescents in Ethiopia. It also focused on internalising and externalising behavioural problems, which are broader categories of emotional and behavioural problems. Emotional problems are characterised by inward behaviours that might affect the self, while behavioural problems refer to outward behavioural problems by which it harm or disturbs the others

The main focus of this study was to address the following basic research questions and the stated hypotheses:

**Research Question 1:**

What social competence problems do secondary school adolescents in Ethiopia experience?

**Correlational Research Hypothesis 1:**

There is no significant difference displayed between gender groups and social competence problems by secondary school adolescents of Ethiopia.

**Research Question 2:**

What are the trends of emotional and behavioural problems among Ethiopian secondary school adolescents?

**Correlational Research Hypothesis 2:**

There is no significant relationship display between sex groups and emotional and behavioural problems by secondary school adolescents of Ethiopia.

**Correlational Research Hypothesis 3:**

There is no significant relationship between age groups and emotional and behavioural problems by secondary school adolescents of Ethiopia.

**Correlation Research Hypothesis 4:**

There is no significant relationship among social competence problems and syndrome problems by secondary school adolescents of Ethiopia.

Hence, to answer the described research questions and the stated hypotheses, selection of an appropriate research design and methods is necessary. Different

instrumentation and procedures that were used to execute the research activities are discussed later on.

#### **4.3 RESEARCH DESIGN AND METHODS**

Research design refers to a plan for how the research is to be executed and the processes/procedures involved in conducting research activities. In this regard, Creswell (2009:3) explained, “Research designs are plans and the procedures for research that span the decisions from broad assumptions to detailed methods of data collection and analysis”. In other words, research design is a blueprint that serves a research study as a guide and includes procedures to obtain responses to research questions or hypotheses (Martin & Bridgmon, 2012). Basically, there are three research approaches that are clearly indicated by different researchers or authors: quantitative, and qualitative, which is well-known and mixed research, which has recently gained more prominence (Creswell, 2009). Of course, the utilisation or selection of research approaches for a research study may be heavily dependent upon the purpose of the research, problems and ways of analysing data generated from the subject of the study. In this study, a quantitative research design was employed to search for answers to the posed research questions and to verify the stated research hypotheses. A quantitative approach was employed because it involves the assigning of numerical values to the phenomenon under investigation (Vanderstoep & Johnston, 2009). However, quantitative research is dependent on proper measurement of the quantity of phenomena (Kothari, 2004).

Survey studies involve quantitatively describing phenomena such as attitudes, behaviours and opinions of a population by investigating a representative sample of the latter (Creswell, 2009; Goodwin, 2010). In addition, descriptive research such as a survey study tries to describe situations, problems and phenomena such as the said attitudes and feelings, systematically (Kumer, 2011). As a result, when investigating large populations, questionnaires are mainly used to gather data on behaviours, attitudes, beliefs, opinions or else intentions of the subjects under investigation (Bernstein et al., 2008).

Furthermore, one of the attributes of a survey study over all other methods is its specific emphasis on a representative sample of a population because the aim is to make generalisations about a relatively large sample of the population (Coolican, 2016). As a result of this, a survey was considered as a better fit to this study. In other words, one of the best reasons as explained by Vanderstoep & Johnston (2009:79) is that “Surveys are the best way to collect a large amount of data from a large number of people in a short amount of time.” That is, this is a more economical way of gathering and analysing data from a larger group of the population.

Additionally, a correlational study was also used. At times one is required to know the existence of any relationship among different variables in social sciences as well in psychology (Singh, 2006). As a result, a correlational study was used in combination with the survey study whenever it necessitated showing relationships among different variables or else groups of individuals under study. Therefore, quantitative research design, survey and correlational research methods were selected to meet the objectives of the study as described above.

#### **4.3.1 Instrumentation and data collection**

It will be recalled that this study was designed to describe the prevalence of emotional and behavioural problems among adolescents with particular focus on pitfalls and practices of secondary schools in Ethiopia. The study specifically targeted Oromiya regional state of East Showa administrative zone’s public secondary schools’ adolescents. Data for the study were generated from a survey of secondary school adolescents through questionnaires.

A survey approach was selected because this technique delivers a rigorous gathering of data (McQueen & Knussen, 2013). Moreover, as supplementary input, research conducted in different countries was used to make a comparison and to validate the data generated by the use of the questionnaires of the students.

In this study a quantitative approach was adhered to by using the YSR to produce information on related issues from the students. In this regard, the prevalence of

emotional and behavioural problems as well as social competence/adaptive functioning as regards their social activities and academic conditions were assessed.

In Ethiopia, data had never been collected from teachers and parents; fundamentally for two reasons. On the one hand, to access data from parents in the context of high school adolescents is very difficult due to geographical location and residence disparity. Apart from their unavailability, it is expected the majority of parents in Ethiopia were not expected to be sufficiently educated or able to fill in the questionnaires. On the other hand, teachers and parents cannot actually express the emotional and behavioural problems of youth more accurately than the adolescents themselves. One of the reasons could be large class sizes. Those teachers could not be expected to identify and recognise their students to provide appropriate and unbiased information.

Furthermore, most adolescents spend more time in schools and with their peers. As a result, parents may have fewer contacts with their children. This in turn would have led to less understanding of each other. In this regard, reflection by teachers and parents on the youth, though it might be worthwhile and comprehensive, might not accurately reflect the actual state of the students' behaviours.

As an example, anxiety is the most common constituent of internalising problems in childhood and adolescence, but is often not recognised and well reported by both parents and teachers (Rodgers & Dunsmuir, 2015). In addition, early adolescents are more attracted to peers and give less consideration to their parents while middle adolescents are largely inclined to look for new peers and pay no attention to their parents (Spano, 2004). Furthermore, adolescence is a period during which independence increases, family relationships change and priority is given to peer relationships (Sales & Irwin, 2013). Consequently, these were the main rationales and indications to exclude both parents and teachers from generating information for this study.

In general, due to the reasons advanced above, both the teachers and the parents were not considered as providers of information about the adolescents for this study.

Adolescents are able to provide sufficient and appropriate information about themselves, if given the responsibility to generate the necessary data about themselves. In this regard, school going adolescents were made to reflect on their emotional and behavioural problems through the ASEBA 2001 Youth Self-Report Questionnaire.

#### *4.3.1.1 Questionnaire*

As previously mentioned, the survey method is a useful technique in collecting a great deal of data from large population (McQueen & Knussen, 2013). Since this study involved a great deal of data gathering from a large group of the population, questionnaires were considered the best tool. The YSR of the Achenbach System of Empirically Based Assessments (ASEBA, 2001) was utilised. It has been used to assess self-related problems in many societies (Achenbach & Rescorla, 2001). For instance, Ivanova et al. (2007) reviewed studies conducted in twenty three societies to investigate the generalisability of the YSR eight-syndrome model/structure, and they found a good fit for those societies, including Ethiopia – research was conducted on children, with root-mean-square error of approximation of 0.035, a comparative fit index 0.906 and a Tucker-Lewis index of 0.934.

The ASEBA 2001 YSR questionnaire was translated into the Amharic and Afan-Oromo languages with permission obtained from the ASEBA organisation (The University of Vermont (ASEBA) Research Centre for Children, Youth and Families Inc.) with translation license number # 1277-01-07-16 (Appendix A). The translations were carried out to make responding to the questionnaire easier and to allow for better understanding of the questions by the research respondents. The translation of the English version into local languages created a better opportunity for the research participants to feel free and react to the questions with a clear understanding and comprehension of the concepts of each item. In the translations, special attention was given to ensuring that questions were to be free of ambiguity and bias. Furthermore, care was given to ensure the questions would be appropriate to the cultural contexts of the research participants.

The YSR was selected because it is a standardised tool. Furthermore, this instrument is widely used worldwide to study emotional and behavioural problems of adolescents, both internalising and externalising ones. The reliability and validity of ASEBA of YSR is high and wide-ranging across different cultural contexts (Rush, Castel & Desmond, 2009). Additionally, the mean test-retest reliability for the YSR competence scales was 0.88, whereas the internal consistencies of problem scales range from 0.67 to 0.95 (Bordin et al., 2013).

Furthermore, appropriately constructed questionnaires with a quantitative research approach yield precise, explicit and predetermined measures and identification of relevant variables in an effective way. Likewise, they are economical and straightforward to administer to a large number of research participants. The data collected can also be easily transformed into coding for statistical analysis and there is a considerable possibility of being able to generalise the findings as well (Creswell, 2009).

The said questionnaire of ASEBA 2001 was categorised in three sections. The intent of the first section was to elicit information on demographic characteristics of the research participants, such as age, grade levels, and the like. The second section focused on social competence/adaptive functioning such as activities, social activities, and academic competence. The third section encompasses the experiences of school adolescents regarding their emotional and behavioural characteristics/problems, identified as syndrome scales (that were used to collect data on emotional and behavioural problems or else generate data about internalising and externalised behavioural problems of school adolescents) and which the YSR questionnaire identified as close ended questions. Almost all the social competences as well as the syndrome scales were fully structured/closed ended questions. The respondents were simply required to mark the numbers by which they rated them, except for the demographic section in which the respondents were required to write their answers.

Generally, the ASEBA 2001 YSR is a type of three Likert scale on all items for emotional/internalising and behavioural/externalising problems categories. Likewise,

for social competences, some diversified types of Likert Scales were used (three or four Likert scales based on the items required), (see Manual for the ASEBA School-Age Forms by Achenbach & Rescorla, 2001: 205-208). Items that respondents were required to rate had the following scores for syndrome scales: 0 = not true, 1 = somewhat or sometimes true, and 2 = very true or often true over the past 6 months. Finally, the numerical values of the responses of the respondents were added together by grouping those items designated to measure the particular proposed social competence or identified by adaptive functioning and syndrome scales, or items that were used to measure emotional/internalising and behavioural/externalising problems which are recognised as problem scales or subscales.

Furthermore, the questionnaire possessed different sections and subscales; there are different numbers of items for different groups of subscales. Table 4.1 below indicates the number of items in each of the competence scales and syndromes scales. Of course, the items of each scale in YSR were not all presented sequentially; rather, they were arranged in a non-sequential order in most instances. In the other words, they are systematically arranged in different positions to measure and generate the necessary data more smoothly and systematically. After the data were fed into the computer software (SPSS 20) those non-sequenced items were added together and grouped based on their competence categories or syndrome categories while analysing the data (see Manual for the ASEBA School-Age Forms by Achenbach & Rescorla, 2001:33,211-215).



**Table 4.1: Descriptive statistics of the Distribution of Items within Competence and Syndrome Scales**

Competence and syndrome scales	Number of Items	Likert scales
<b>Competence scales</b>		3-4
Activities	6	
Social activities	6	
Academic performance	4	
Total competence	16 (Sum of the above)	
<b>Syndrome scales</b>		
Anxiety/depressed	13	3
Withdrawn/depressed	8	
Somatic complaints	10	
Social problems	11	
Thought problems	12	
Attention problems	9	
Rule-breaking behaviours	15	
Aggression behaviours	17	
Other problems	16	
Internalising problems	13+8+10=31 (anxiety, withdrawal & somatic)	
Externalising problems	15+17=32 (rule-breaking & aggression)	
Total/emotional & behavioural problems	31+32=63 (internalising & externalising)	

As noted, the ASEBA 2001 YSR translated versions of Amharic and Afan-Oromo languages were used to collect data for this research activity because the majority of the respondents were identified as Afan-Oromo speakers of these languages. Table 5.1 provides more detailed information about language preferences of the research participants.

### **4.3.2 Population and sampling**

As mentioned in the background to this study (Chapter 1), the population of this study comprised secondary school adolescents in East Showa Zone of Oromiya National Regional State in Ethiopia. This population was then purposively sampled due to its geographical proximity to the central part of Ethiopia as well as the locality of the researcher, allowing for accessible data collection within a reasonable time and because of economic constraints. This zone includes Addis Ababa, the capital city of Ethiopia. During the 2014/15 academic year, East Showa Administrative zone was divided into 13 Woredas/Districts and one Administrative City: Adama City. There were 35 public secondary schools in East Showa Administrative Zone within those Woredas and administrative city. For the purpose of this study, all Woredas with a population of more than 2000 secondary school learners were selected as a target of study area for deliberate/purposive decisions. The rest were excluded from consideration as a target area of the study. One of the reasons for this approach was to be more economical with regard to collecting data. This is because a Woreda with a population of less than 2000 secondary school learners implies that the inhabitants as well as the schools were widely dispersed, subsequently it was thought that, excluding such Woredas would not have an effect on the study since they were characteristically more or less homogenous with the population of the other, nearer Woredas.

Accordingly, six Woredas and one city fitted the criteria: Adama, Mojo, Adami-Tullu, Batu, Dugda and Boset Woredas as well as Adama city were considered as a source of data since they had populations of over 2000. These areas comprise nearly 50% of the total Woredas of the East Showa administrative zone. Besides, it was in these particular areas in which the majority of the population of the Zone was concentrated (comprising 74 % of the total of the secondary school population) based on data obtained from East Showa Educational Office (see Table 4.2).

The total population of the secondary school adolescents in the study area was 27,463 during the 2014/15 academic year. Of these, 714 participants (2.6% of the total population of the zone) were considered as active participants of the study. The

research participants were incorporated into the study through the principle of proportionality of the population as indicated in Table 4.2. This sample size was determined by the sample size determination formula of Kothari (2004) and adding about 90% of the value obtained by this formula to make the considered sample size. This was done with a 95% confidence level ( $Z = 1.96$ ) and with the probability of selecting sample 50% ( $P=0.5$ ) and an acceptance merging error of 5.0% ( $E=0.05$ ). Subsequently, the sample size of the study with this formula for the total population of 27,463 was found to be 380.

Furthermore, Pathak (2011) stated that the sample size estimates for populations of 10,000, 50,000 and 1,000,000 were 370, 381 and 384 respectively. This was much closer to the sample size obtained through the Kothari (2004) sample size formula. Nevertheless, numerous aspects may affect the data collection processes from such a restricted sample size. This might be attributed to different factors, such as the readiness and persistence of the respondents to work on such rigorous questions accurately and with care, the inclusion of a non-adolescent age group in the samples and withdrawal of respondents during the data collection processes. Therefore, taking additional samples of the sample size obtained by Kothari (2004), determining the formula and the estimate of the sample size of Pathak (2011), was very useful. As a result, an additional 336 (90% of the calculated sample size) were taken to overcome any limitations that could occur because of sample size or, with an uncontrolled situation as cited above or other unexpected circumstances. This approach could keep the data generated more dependable and more standardised. As a result 716 (380+336) respondents were selected and involved in producing data for the study.

As indicated above, this was considered necessary, since there are a number of factors that might hamper obtaining the appropriate/desired data with the use of questionnaires. It is generally expected that the return rate of a questionnaire correctly filled out could be 25% - 30%. In such a case, having additional participants at the initial stage is a very valuable tactic in research activities. This technique is particularly important in social sciences where a researcher has little or no control over the behaviours and actions of the research participants during the

data gathering process. In addition, if the questionnaire was too massive it might become tedious for respondents to fill in and complete the questionnaire properly. As a result, there would be a high probability of a poor return rate. To reduce the probability of the inclusion of non-adolescent participants (above 18 years) systematic exclusion and compensation mechanisms were employed.

By chance, it was found that the students' enrolment rate increased in the 2015/16 academic year: data obtained from the Zonal Educational Office disclosed that the enrolment rate was 27,463 in the 2014/15 academic year but increased to 35,814 in the academic year 2015/16.

In general, it was assumed that nearly doubling the calculated sample size could possibly make the data generated from such informants more reliable and more representative. Furthermore, some respondents who were slower in responding to the questionnaire might face difficulty in completing and returning it within the intended period of time which the schools had permitted and allowed for the data collection. As a result, 716 participants (2.6% of the total population) were considered a representative sample of the considered population. Accordingly, this was done to overcome the impact of the incomplete or the inappropriately filled in the questionnaires due to different reasons such as withdrawal from participating in the study. In particular, the incomplete items or the omission of more than 8 YSR problem items were rejected, as were participants beyond 18 years of age (non-adolescent). To keep the rejected cases that might be inferred from 15% to 20%, the above sample size was decided on.

On the other hand, a random sampling approach was used to select secondary schools located in the study areas. Again, a simple random sampling procedure was used to select sections needed to be included in the study by grade levels. The selection procedure was performed in such a way that for each school both boys and girls were given equal opportunities.

**Kothari (2004) sample size formula and calculation:**

$$n = \frac{z^2 \times p(1-p)N}{e^2 \times (N-1) + z^2 \times p(1-p)}$$

$$n = \frac{1.962^2 \times 0.5 \times (1-0.5)27463}{0.05^2 \times (27463-1) + 1.962^2 \times 0.5 \times (1-0.5)}$$

$$n = \frac{26429.32}{69.617} = 380$$

Where; *n*- Samples size

*z*- The value of standard variation at 95% confident interval

*P*- %age picking a choice, expressed in decimal (0.5)

*e*- Precision level/merging of error (0.05)

*N*- Total population (27643)

**Table 4.2: Descriptive Statistics of Population and Samples**

Woreda or District	Total Population									No of Schools Per Woreda	Sample Size			Remark
	Grade 9			Grade 10			Grade 9 & 10				Grade levels			
	M	F	T	M	F	T	M	F	T		9	10	T	
Adama	817	778	1595	795	668	1463	1612	1446	3058	3	56	52	108	Samples selected from 74% of the population
Adama City	993	1230	2223	878	987	1865	1871	2217	4088	3	78	66	144	
Adamitulu	988	851	1839	611	512	1123	1599	1363	2962	4	65	40	104	
Batu	658	542	1200	491	511	1002	1149	1053	2202	2	42	36	78	
Bosat	715	727	1442	509	480	989	1224	1207	2431	3	50	35	86	
Dugda	704	876	1580	514	658	1172	1218	1534	2752	3	56	41	97	
Mojo	752	864	1616	553	639	1192	1305	1503	2808	2	57	42	99	
Ada'a	365	268	633	221	196	417	586	464	1050	3	0	0	0	
Bora	236	208	444	174	158	332	410	366	776	2	0	0	0	
Fantalle	502	419	921	472	349	821	974	768	1742	2	0	0	0	Excluded from Sampling (26%)
Gimbichu	362	363	725	309	255	564	671	618	1289	2	0	0	0	
Liban	227	228	455	166	154	320	393	382	775	2	0	0	0	
Lume	299	206	505	197	174	371	496	380	876	3	0	0	0	
Metahara	188	148	336	172	146	318	360	294	654	1	0	0	0	
Total	7806	7708	15514	6062	5887	11949	13868	13595	27463	35	404	312	716	

Source of data: *East Showa Zonal Educational office (May, 2015)*

### **4.3.3 Pilot test**

A pilot study was carried out to verify the validity and reliability of the questionnaires that were translated from English to Afan-Oromo as well as Amharic languages. The pilot questionnaire was administered to 78 secondary school adolescents of the same district: Adama city. However, before the administration of the questionnaires to the pilot group, colleagues (experienced researchers) were invited to assess it for language clarity as well as proper translation on the questionnaires. The reliability of the instrument was determined using Cronbach's alpha. Thus, before actual data for research had been collected, pilot tests had been simultaneously conducted for the Amharic and Oromic translated versions respectively, for 78 students. As a result, the reliability statistic of Cronbach's alpha was found to be 0.959 for 118 items for the two languages calculated together. Finally, the required modifications were made according to the feedback generated from the pilot group test.

The pilot group test was carried out in order to determine the clarity and relevance of the items, so as to ensure generating appropriate data. In other words, it was intended to increase the possibility of eliciting information about the emotional and behavioural problems of the adolescents from the pilot test respondents.

The pilot test moreover helped to investigate its associated effect on social and academic issues of secondary school adolescents in Oromiya Regional State of East Showa administrative zone. Then, modifications were made based on the feedbacks obtained from the pilot test participants.

### **4.3.4 Validity and reliability**

The trustworthiness of a study is a crucial issue to maintain the standards of the research in any research activity in general. The instrument used to collect data for this research was a standardised tool translated and used in more than 80 languages, as discussed in Chapter 4, section 4.3.1.1.

#### 4.3.5 Method of data analysis

The collected data was analysed using a quantitative method. An IBM SPSS Statistics 20 package was used to organise and analyse the said data. The SPSS package enables data to be very accurately recorded and analysed, with less effort and energy than traditional/paper-pencil bases. In addition, it helped to indicate relationships amongst the different variables as it was designed and intended precisely and economically.

Appropriate cleaning of the data was done prior to the entry of data into the software for analysis. In this regard, incomplete questionnaires were sorted out and rejected from being entered into the computer system. In addition, before entering the data into SPSS, each item was coded and categorised which prevented double entry of the data into the SPSS program. This process was used for easy revision and correction of any error while entering the data.

The demographic characteristics of the respondents were presented in the form of a table. Basic descriptive statistics such as frequency, percentages, mean and standard deviations were employed to describe the general characteristics of the research participants. Data related to emotional/internalising and behavioural/externalising problems were analysed through frequencies and percentages. These were identified by the cut-off points of T- scores and percentiles for which these two serve as a matrix to categorise individuals into different categories: normal, borderline or clinical ones, as indicated in Chapter 5 under the section 5.2. These methods were based on the Manual for the ASEBA School-Age Forms and Profiles (Achenbach & Rescorla, 2001).

Moreover, the analysis of variance, ANOVA, was used to test for significance of statistical differences between male and female participants on social competence problem scales and subscales; and emotional/internalising and behavioural/externalising problems scales and subscales between gender groups. The ANOVA was used because of its effectiveness in showing the relationships among different variables with a single step, by which it is impossible to use a t- test or else possible

only through multiple times t-test (McQueen & Knussen, 2013). Therefore, ANOVA was preferred and used to scrutinise whether or not there were statistically significant differences between male and female participants on different sub scales.

#### **4.4 ETHICAL CONSIDERATION**

First of all a letter of permission was granted from East Showa Administrative Zone's Educational Office to collect data from the sample schools. The letter were directly submitted to the concerned sample schools with copies sent to the concerned Woreda Educational Offices, then after permission was obtained from the sample schools. The students' consent was obtained after the purpose and the procedure of the study was clarified to students orally with the presence of each school authority in each section and grade level of the sample school whether the students were willing to take part in the research or not. Students who volunteered/assented to participate in the study were given a written letter for the consent of their parents/guardians and asked to explain the situation to their parents and return the signed consent letters, if they were willing to volunteer. This was done because to get all parents/guardians in the context of Ethiopia was too difficult. This was because most parents/guardians were agrarian by which they live and work far away dispersed from the schools localities. Therefore, it was too difficult to get them at school to explain the issues to them.

The research participants those who were assent to participate in the study guaranteed their parents/guardians signed consent also assured and informed that the data generated from them would be used solely for research purposes. Further, they were guaranteed that confidentiality would be maintained in every aspect and condition. Lastly, they were given the assurance that they could withdraw at any time if they felt any discomfort while participating in the research process. In addition, the research and ethical principles of the UNISA research guidelines were adhered to. In general, oral consents were obtained from all research participants and written consent from their parent/guardians, East Showa Educational Office and the sample schools (see appendixes C- N).



## **4.5 CONCLUSION**

This chapter of the study dealt with research design and methods. A quantitative research design was selected to conduct this study; survey and correlational methods were the research techniques of the study. Furthermore, the population and sampling procedures were clearly described. The data collection instrument and procedure as well as data analysis techniques and procedures were explained.

The next part of the study is Chapter five. It pertains to data presentation and analysis; the quantitative data gathered through the questionnaires is presented and analysed.

## **CHAPTER FIVE**

### **DATA PRESENTATION AND ANALYSIS**

#### **5.1 INTRODUCTION**

In the previous chapter (Chapter four) the research design and methods were explained: a quantitative approach which employed a descriptive survey and correlational study. In addition, the data gathering instrument, the method of analysing the data and the population and sampling methods were presented in more detail.

This study, the reader will recall, focused on emotional and behavioural problems among adolescents of secondary schools in Ethiopia. Accordingly, the purposes of the study were to examine the prevalence of social competence problems/pitfalls of emotional and behavioural problems and emotional/internalising and behavioural/externalising problems of secondary school adolescents in Ethiopia. In addition, the study confirmed the relationship between sex groups with regard to internalising and externalising problems as well as social competence/functioning problems scales.

This chapter focuses on the presentation of the collected data as well as the data analysis. The data collected through questionnaires were organised and tabulated into different tables to make the data presentation and analysis more comprehensible and to present it in a visible manner. Thus, the collected data are presented and analysed with different descriptive and inferential statistics. Frequency, percentages and ANOVA were used for analysis of the data to describe the prevalence of emotional and behavioural, social competence problems of adolescents as well to describe and investigate the existence of relationships among variables.

The procedure of data presentation and analysis begins with the presentation of demographic characteristics of the respondents and is followed by the presentation

of the functioning/adapting abilities of the respondents. Finally, the presentation and analysis of the problem/syndrome scales take their turn.

## **5.2 DATA PRESENTATION**

The required data for this study was collected using questionnaires to interrogate the sample group during February through to June 2016 based on the YSR questionnaire (ASEBA, 2001) which had been translated into two local language versions, as mentioned in the instrumentation section. The collected YSR data on emotional/internalising and behavioural/externalising problems consisted of items rated as 0=not true, 1=somewhat or sometimes true, and 2=very true or often true over the past 6 months by the respondents. The information was also coded and fed into the computer system using SPSS software for analysis purposes. Hence, the data collected through YSR were organised, analysed and interpreted utilising different statistical methods: frequency distributions and percentages were employed. T-scores and percentiles were used to analyse and interpret social competences/functioning problems and syndromes scales. Since the cut-off points for different categories (clinical, borderline and normal) were determined by T-scores and percentiles, by which they serve as matrix (Bordin et al., 2001)

The cut-off points of T-scores and percentiles for competence scales were less than 31 and 3 respectively, although, the cut-off points for total competence were less than 37 T-scores and 10 percentiles for the clinical category. On the other hand, interpretations of behavioural and emotional problems were made by T-scores and percentiles greater than 69 and 97 respectively. Furthermore, the cut-off points for internalising, externalising and total problem the T-scores and the percentiles values were greater than 63 and 90 respectively (Bordin et al., 2001).

Beyond organising, encoding and analysing of data, normalisation of the distribution of the data was performed. Normalisation of data involves the exclusion of slight abnormalities in the normal raw data distributions, irrespective of the shape of the original distribution of the raw scores, because T-scores and percentiles or standardised scores in general need to be interpreted appropriately in normal

distribution data (Gronlund & Linn, 1990). As a consequence, whenever T-scores are supposed to be used as a metric for a test, it must be absolutely essential that the normalisation process of the data is performed (Thorndike, 2008). Therefore, slight exclusions of extremes of data were made to maintain the normal distributions of the data before analysis and interpretation were carried out.

### 5.2.1 Demographic characteristics of the respondents

The following tables, Tables 5.1 and 5.2, represent the demographic features of the research participants. The backgrounds of the respondents are presented in these two tables just to keep the data clear and straightforward in the presentation as well as for easier understanding of the information.

**Table 5.1: Descriptive statistics of respondents by ethnicity, sex, grade, language and age**

Ethnic Groups			Grade Levels				Language Favoured			Age			
Categories	No	%	Sex	9th	10th	Total	%	Categories	No	%	Year	No	%
Amhara	166	27.5	Male	169	139	308	51.1	Amharic	286	47.4	13	1	.2
Oromo	388	64.3	Female	145	150	295	48.9	Afan-Oromo	317	52.6	14	12	2.0
Gurage	21	3.5	Total	314	289	603	100.0	Total	603	100.0	15	67	11.1
Tigre	8	1.3									16	210	34.8
Others	20	3.3									17	194	32.2
Total	603	100.0									18	119	19.7
											Total	603	100.0

Table 5.1 records the different ethnic groups who were involved in the study. As depicted in the table, the majority of informants were of the Oromo ethnic group (63.5%), followed by Amhara (27.5% of the total population). This was happened, because the study area was delimited to Oromiya National Regional State of Ethiopia. It ought to be noted that the Ethiopian federal administration system is based on ethnic classification. In terms of language preference, 52.6% of the respondents responded in the Afan-Oromo version while 47.4% preferred, and responded in, the Amharic version. Afan-Oromo translation the tool into the two

different languages minimised difficulties that could have arisen from language barriers.

It is depicted that 314 respondents (169 males and 145 females) from grade 9 and 289 (139 males and 150 females) respondents of grade 10 were involved in completing the questionnaire. Promisingly, 603 responses were considered for final analysis and interpretations purposes because this number of informants filled the questionnaire in fully and properly. The rest did not fully complete the questionnaire or else were non-adolescents, while a few of the respondents withdrew from participating in the research.

The analysis identified that the mean age distribution of the respondents was 16.56 years with a standard deviation of 1.002. The youngest was 13 years old (only one individual) and in terms of the criteria the oldest was 18 years old. Questionnaires filled in by respondents over 18 years old were discarded because this age group (older than 18) is considered to be adults, not adolescents (Bordin et al., 2001).

**Table 5.2: Descriptive statistics of respondents by school, sex and grade levels**

Woreda City	Schools	Number Of Respondents By Grade Levels									Rejected Cases by Grade Levels						Overall thesis	
		9 <sup>th</sup>			10 <sup>th</sup>			9 <sup>th</sup> +10 <sup>th</sup>			Incomplete			Age > 18				Total Cases
		M	F	T	M	F	T	M	F	T	9 <sup>th</sup>	10 <sup>th</sup>	T	9 <sup>th</sup>	10 <sup>th</sup>	T		
Adama City	Goro	34	31	<b>65</b>	24	44	<b>68</b>	58	75	<b>133</b>	4	0	<b>4</b>	1	0	<b>4</b>	<b>7</b>	<b>140</b>
Adama	Wonji	4	3	<b>7</b>	17	35	<b>52</b>	21	38	<b>59</b>	7	8	<b>15</b>	0	2	<b>2</b>	<b>17</b>	<b>76</b>
	Awash/M	30	25	<b>55</b>	4	8	<b>12</b>	34	33	<b>67</b>	5	1	<b>6</b>	1	3	<b>4</b>	<b>10</b>	<b>77</b>
Bosat	Boset	22	18	<b>40</b>	23	19	<b>42</b>	45	37	<b>82</b>	10	5	<b>15</b>	1	3	<b>4</b>	<b>19</b>	<b>101</b>
Mojo	Mojo	15	17	<b>32</b>	10	2	<b>12</b>	25	19	<b>44</b>	8	3	<b>11</b>	2	3	<b>5</b>	<b>16</b>	<b>60</b>
Dugda	Oda/B	18	23	<b>41</b>	21	29	<b>50</b>	39	52	<b>91</b>	3	7	<b>10</b>	1	3	<b>4</b>	<b>14</b>	<b>105</b>
Batu	Batu	12	16	<b>28</b>	19	8	<b>27</b>	31	24	<b>55</b>	6	3	<b>9</b>	5	0	<b>5</b>	<b>14</b>	<b>69</b>
Adamitulu	Adamitulu	34	12	<b>46</b>	21	5	<b>26</b>	55	17	<b>72</b>	4	6	<b>10</b>	2	2	<b>4</b>	<b>14</b>	<b>86</b>
<b>Total</b>		<b>169</b>	<b>145</b>	<b>314</b>	<b>139</b>	<b>150</b>	<b>289</b>	<b>308</b>	<b>295</b>	<b>603</b>	<b>44</b>	<b>35</b>	<b>79</b>	<b>13</b>	<b>16</b>	<b>32</b>	<b>111</b>	<b>714</b>

Remark: Two grade 9 respondents of Gore secondary school withdrew from responding to the questionnaire

As displayed in Table 5.2, questionnaires were distributed to 716 respondents of 6 Woredas and one city of East Showa Administrative zone of 8 secondary schools

that were selected as the representative sample of the study. In Chapter four it was indicated that 380 participants were considered as a sufficient sample size of the intended population according to Kothari's (2004) sample size calculation formula. However, to be on the safe side, 2.6% of the population which was 716, were sampled and questionnaires were administered to these research participants. Six hundred and three (603) questionnaires were properly and correctly completed. Consequently, 111 respondents' questionnaires were rejected due to incomplete responses (79 or 11.06%) and due to age factors: respondents whose ages were greater than 18 years (32 or 4.08%) as well as 2 withdrawals (0.28%). In other words, 15.83% of the distributed questionnaires were excluded due to the above mentioned reasons.

According to Cronbach's alpha, the reliability statistics were found to be 0.899 for 118 items. This implies that the reliability of the items was found to be high. Consequently, they were well accepted and approved for data analysis and interpretation.

To sum up, more than the expected numbers of the respondents properly and accurately filled in the questionnaires. Therefore, in accordance with the Kothari sample size formula, a more promising sample size was incorporated in the current study. The aim of doing so was to keep the results of the study more reliable promising and to make the generalisability more rigorous.

### **5.2.2 Social competence/adaptive functioning and syndrome/problem scales**

The social competence/adaptive functioning and syndrome problems of the respondents are presented here, with the social competence/adaptive functioning scales presented first, followed by syndrome scales those measure emotional and behavioural problems which encompass the research participants' internalising and externalising problems.

In this regard, the cut-off points were based on T-scores and percentiles (Bordin et al., 2001). Therefore, it was considered that for social competence activities, social

activities, academic competence and total social competence, the cut-off points were the lowest for both clinical and borderline categories, one following the other. In contrast, the cut-off points of T-scores and percentiles for the scales syndromes – emotional and behavioural problems of the narrow band scale (anxious/depressed, withdrawn/depressed, somatic complaints, social problems, thought problems, attention problems, rule-breaking behaviours, and aggressive behaviours) as well as for broad band scales (internalising, externalising, and total behavioural problems) were the highest T-scores and percentiles for both cases, with clinical and borderline categories following one another consecutively (Bordin et al., 2001).

Additionally, the cut-off points for different categories are explicitly indicated as follows. The cut-off points for social competence – social skills, such as interpersonal relations (Zach, Yazdi-Ugav & Zeev, 2016) – are less than a T-score of 31 and a percentile of 3, while less than a T-score of 37 and a percentile of 7 for total social competence were defined as a clinical category. Likewise, T-scores of 31 to 35 and percentiles of 3 to 7 were classified as the borderline category, while 37 to 40 T-scores and 10 to 16 percentiles for total social competence were considered as borderline. Beyond this, scores were considered as a normal group. By contrast, the cut-off points for syndromes in the emotional/behavioural narrow-band scale are greater than a T-score of 69 and a percentile of 97, whereas T-scores and percentiles greater than 63 and 90 respectively were classified as a clinical category for broadband scale syndromes. Likewise, 65 to 69 T-scores and 93 to 97 percentiles are classified as a borderline category for the narrow band syndrome, while 60 to 63 T-scores and 84 to 90 percentiles for the broad band syndrome. Therefore, the cut-off points of the data of this research also followed these principles in all cases for the purpose of analysis and interpretations.

Consequently, according to these cut-off principles, different classifications have been acknowledged or assigned. This is because it is a standardised method for assigning emotional and behavioural problems or else internalising and externalising problems into different categorical levels. Based on this explanation and cut-off principles, data are presented consecutively according to the order of the research questions and hypotheses as indicated in Chapters one and four.

Accordingly, the SPSS package was used to convert the responses of the respondents into standardised scores that are T-scores and percentiles by which they serve as metrics for the cut-off points into different categories. Subsequently the analysed data results were transferred to Excel sheets for arranging the results in ascending or descending order. Arranging the analysed results in this order helped a great deal in making it easier to count the frequencies or the number of respondents whose scores of social competences or syndrome scales fall into different categories – clinical, borderline and normal categories – based on the criteria of T-scores and percentiles as mentioned above, concerning the cut-off points.

Subsequently, all the tabled results found in the data presentation parts of this study were organised and summarised using these procedures and principles. Listing all the data arranged in ascending or descending order in this thesis was impractical. This is because the amount of data was so considerable it might have had to be displayed over many pages, which would have been very tedious and unattractive. In other words, the minimum numbers of rows in a table would have been at least 604, and with a font size of 11 and italic format, this would have required 13 pages. This constitutes the rationale as to why a summarised and more compact version of the data was presented in all the tables displayed in this chapter indicating frequencies and percentages of all the social competences or syndromes scale problems.

#### 5.2.2.1 *Research Question 1*

The first research question enquired: *What social competence problems do secondary school adolescents in Ethiopia experience?* Social competence problems, as indicated in Table 5.3, encompass four subscales – activities problems, social activity problems and academic performance problems. Total competence problems comprise all these sub scale categorical problems scores summed together (refer to ASEBA manual 2001: 205-207). Percentages were used to analyse the data based on the frequency obtained from the T-scores and percentile cut-off points.



**Table 5.3: Descriptive statistic of social competence scales by sex**

Social Competences scales	Categories	Total (M+F)		Males		Females	
		N	%	N	%	N	%
Activity problems	Normal	550	91.21	290	94.16	260	88.14
	Borderline	3	0.50	2	0.65	1	0.34
	Clinical	50	8.29	16	5.20	34	11.53
Social activity problems	Normal	557	92.37	286	92.86	271	91.86
	Borderline	28	6.64	14	4.55	14	4.75
	Clinical	18	2.98	8	2.6	10	3.39
Academic performance problems	Normal	531	90.17	276	91.62	255	87.63
	Borderline	27	4.58	10	3.36	15	5.16
Total competence problems	Clinical	31	5.26	12	4.03	21	7.21
	Normal	498	83.28	267	87.54	231	78.84
	Borderline	41	6.86	16	5.25	25	5.83
	Clinical	59	9.87	22	7.21	37	12.63

Table 5.3 depicts that 8.29% of the participants (5.2% males and 11.53% females) are categorised in the clinical category on the activity subscale. On the other hand, 2.98% (2.60% males and 3.39% females) were in clinical categories with regard to social activities problems, while 6.64% (4.55% males and 4.75% females) were located in borderline categories. Concerning academic performance problems, 5.26% of the respondents (4.03% males and 7.21% females) were found to be in clinical categories, while 4.58% (3.36% males and 5.16% females) were found to be situated in borderline categories.

Furthermore, 9.87% of the respondents (7.21% males and 12.63% females) were located in the clinical category in terms of total competence problems, whereas 6.86% (5.25% males and 5.83% females) were situated in the borderline category.

#### 5.2.2.2 Research Hypothesis 1

The first hypothesis of the study stated that *there is no significant difference between sex groups and social competence problems of secondary school adolescents of Ethiopia*. Table 5.4 displays the one way ANOVA results regarding the existence of

relationships between males and females among social competence scales and subscales.

**Table 5.4: Inferential statistics of social competence problems by sex through one way ANOVA**

<b>Competence Scales</b>		<b>Sum of Squares</b>	<b>Df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Activities	Between Groups	254.046	1	254.046	25.440	.00*
	Within Groups	6001.596	601	9.986		
	Total	6255.642	602			
Social Activities	Between Groups	13.697	1	13.697	1.619	.204
	Within Groups	5085.198	601	8.461		
	Total	5098.895	602			
Academic Performance	Between Groups	1.300	1	1.300	5.132	.024*
	Within Groups	148.645	587	.253		
	Total	149.944	588			
Total Competence	Between Groups	411.431	1	411.431	17.835	.000*

*Remark: There is a statistically significant difference between males' and females' mean at  $p^* < .05$*

The one way ANOVA as indicated in Table 5.4 clarified that there are statistically significant differences between males' and females' mean scores in all competence subscales, except in the social activities one. This implies that females were to be found in more clinical categories than males, in all social competence problems, except social activities. Specifically, there is a statistically significant difference in the activities subscale with F scores of 25.44, having an alpha p value of 0.00. Furthermore, there is a statistically significant difference between males and females in academic performance having F scores of 5.1132 and with an alpha p value of 0.024. The existence of a statistical variation between genders in the total competence subscale with F scores of 17.835 and with an alpha of 0.00 was also identified.

### 5.2.2.3 Research Question 2

The second research question of the study asked: *What is the prevalence of emotional and behavioural problems among Ethiopian secondary school adolescents?* Table 5.5 presented the organised data about emotional and behavioural problems as well as internalising, externalising and total problems.

**Table 5.5: Descriptive statistics of internalising, externalising and total problems**

Syndromes Scales	Categories	Total		Males		Females	
		N	%	N	%	N	%
Anxiety/Depressed	<i>Normal</i>	557	92.83	288	93.81	269	91.81
	<i>Borderline</i>	23	3.83	9	2.93	14	4.78
	<i>Clinical</i>	20	3.33	10	3.26	10	3.41
Withdrawal/Depressed	<i>Normal</i>	550	91.82	280	91.21	270	92.47
	<i>Borderline</i>	28	4.67	14	4.56	14	4.79
	<i>Clinical</i>	21	3.51	13	4.23	8	2.74
Somatic complaints	<i>Normal</i>	532	92.36	274	93.20	258	91.49
	<i>Borderline</i>	18	3.13	9	3.06	9	3.20
	<i>Clinical</i>	26	4.51	11	3.74	15	5.32
Social problems	<i>Normal</i>	534	89.60	271	88.85	263	90.38
	<i>Borderline</i>	41	6.89	26	8.52	15	6.70
	<i>Clinical</i>	21	3.52	8	2.62	13	4.58
Thought problems	<i>Normal</i>	552	91.85	280	91.21	272	92.52
	<i>Borderline</i>	28	4.66	16	5.21	12	4.08
	<i>Clinical</i>	21	3.49	11	3.58	10	3.40
Attention problems	<i>Normal</i>	532	89.71	272	90.37	260	89.04
	<i>Borderline</i>	40	6.75	21	6.98	19	6.51
	<i>Clinical</i>	21	3.54	8	2.66	13	4.45
Rule breaking behaviours	<i>Normal</i>	508	89.28	246	85.12	262	93.57
	<i>Borderline</i>	21	3.69	14	4.84	7	2.50
	<i>Clinical</i>	40	7.03	29	10.03	11	3.93
Aggressive behaviours	<i>Normal</i>	532	90.48	267	89.00	265	92.01
	<i>Borderline</i>	20	3.40	11	3.67	9	3.13
	<i>Clinical</i>	36	6.12	22	7.33	14	4.86
Other problems	<i>Normal</i>	543	91.26	276	90.79	267	91.75
	<i>Borderline</i>	23	3.87	14	4.61	9	3.09
	<i>Clinical</i>	29	4.87	14	4.61	15	5.15
Internalising problems	<i>Normal</i>	481	82.08	255	84.72	226	79.30
	<i>Borderline</i>	43	7.34	17	5.65	26	9.12
	<i>Clinical</i>	62	10.58	29	9.63	33	11.58
Externalising problems	<i>Normal</i>	464	81.55	222	76.55	242	86.74
	<i>Borderline</i>	38	6.68	25	8.62	13	4.66
	<i>Clinical</i>	67	11.77	43	14.83	24	8.60
Total problems	<i>Normal</i>	503	83.55	257	83.77	246	83.39
	<i>Borderline</i>	44	7.31	20	6.51	24	8.14
	<i>Clinical</i>	55	9.14	30	9.77	25	8.47

Table 5.5 illustrates that a certain number of respondents were found to be in clinical and borderline categories in accordance with different aspects of behavioural and emotional problem subscales. Hence, anxiety (3.33%), withdrawal (3.51%), somatic complaints (4.51%), social (3.54%), thought (3.49%), attention (3.54%), rule-breaking (7.03%) and aggression (6.12%) were in clinical categories. Similarly, anxiety (3.83%), withdrawal (4.67%), somatic complaints (3.12%), social (6.89%), thought (4.66%), attention (6.75%), rule-breaking (3.69%) and aggression (3.40%) problem subscales were in the borderline category.

The internalising problem scores consisted of the sum of the score of all the items of anxiety/depressed, withdrawal/depressed and somatic complaints (Bordin et al., 2001). Similarly, externalising problems consisted of the sum of the score of all the items of rule-breaking behaviours and aggressive behaviours (Bordin et al., 2001; Korhonen et al., 2014). Related to this, 10.58% of the respondents (9.63% males and 11.58% of females) were in clinical groups in terms of internalising problems. On the other hand, 7.13% of the participants (5.65% males and 9.12% females) were classified in the borderline category. Likewise, 11.78% of the respondents (14.83% males and 8.60% females) were in the clinical range in terms of externalising problems. Correspondingly, 6.68% of the participants (8.62% of males and 4.66% of females) were in borderline categories in the externalising subscale.

Concerning total problems, 9.14% of the respondents (9.77% males and 8.47% females) are classified into clinical groups. Moreover, 7.31% of the respondents (6.51% males and 8.14% females) are identified as being in the borderline category. Here, as explained previously, the main concern is not the borderline categories, but rather the clinical categories. Nevertheless, the borderline categories are also of concern since it is a category of transition. In short, it is neither a normal nor clinical category; rather it comprises the transitional scores between the two.

#### 5.2.2.4 Research Hypothesis 2

The second hypothesis of the study stated that *there is no significant relationship between sex groups, and internalising and externalising problems by secondary*

*school adolescents of Ethiopia*. The one way ANOVA used to make comparison among these variables is presented and analysed in Table 5.6.

**Table 5.6: Inferential statistics of syndrome scales by sex through one way ANOVA**

<b>Syndrome Scales</b>		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Anxiety/Depressed	Between Groups	129.477	1	129.477	9.646	.002*
	Within Groups	8026.916	598	13.423		
	Total	8156.393	599			
Withdrawn/Depressed	Between Groups	5.815	1	5.815	.968	.326
	Within Groups	3587.514	597	6.009		
	Total	3593.329	598			
Somatic complaints	Between Groups	7.284	1	7.284	.819	.366
	Within Groups	5107.375	574	8.898		
	Total	5114.660	575			
Social problems	Between Groups	1.279	1	1.279	.145	.704
	Within Groups	5243.236	594	8.827		
	Total	5244.515	595			
Thought problems	Between Groups	25.351	1	25.351	2.286	.131
	Within Groups	6565.369	592	11.090		
	Total	6590.721	593			
Attention problems	Between Groups	1.373	1	1.373	.164	.685
	Within Groups	4940.823	591	8.360		
	Total	4942.196	592			
Rule breaking behaviours	Between Groups	97.526	1	97.526	17.436	.000*
	Within Groups	3165.798	566	5.593		
	Total	3263.324	567			
Aggressive behaviours	Between Groups	89.207	1	89.207	7.438	.007
	Within Groups	7028.542	586	11.994		
	Total	7117.748	587			
Other problems	Between Groups	.005	1	.005	.001	.979
	Within Groups	4466.859	593	7.533		
	Total	4466.864	594			
Internalising problems	Between Groups	313.208	1	313.208	6.387	.012
	Within Groups	28637.681	584	49.037		
	Total	28950.889	585			
Externalising problems	Between Groups	353.395	1	353.395	15.245	.000
	Within Groups	13143.607	567	23.181		
	Total	13497.002	568			
Total problems	Between Groups	.412	1	.412	.001	.976
	Within Groups	272688.877	600	454.481		
	Total	272689.289	601			

*Remark: There are statistically significant differences between males and females at  $p^* < .05$*

The one way ANOVA results provided in Table 5.6 confirm that there are statistically significant differences between males and females experiencing anxiety/depression ( $F= 9.646$ ,  $P= 0.02$ ). Similarly, a significant difference was observed between the two groups in rule breaking behaviours ( $F= 17.436$ ,  $P=0.00$ ) and aggressive subscales ( $F= 7.438$ ,  $P=0.007$ ). Furthermore, a significant difference was observed between the two groups in internalising problems ( $F= 15.24$ ,  $P=0.00$ ) as well as in externalising problems ( $F= 15.245$ ,  $P=0.00$ ). Nevertheless, no statistically significant differences between the males and females were found in the other subscales.

Generally, the one way ANOVA shows the existence of statistically significant differences between males and females with regard to anxiety/depression, rule breaking behaviours, aggressive behaviours, internalising and externalising problems. Nonetheless, no statistically significant differences were observed between the male and female participants of the study.

To sum up, the above two consecutive tables revealed that females were encountering more issues with regard to internalising problems, specifically in the anxiety/depression subscale in contrast to males. On the other hand, males were found to have more difficulties in regard to externalising problems, particularly in rule-breaking and aggressive behaviours, than females.

#### *5.2.2.5 Research Hypothesis 3*

The third hypothesis of this study states that *there is no significant relationship between age and social competence and syndrome scales by secondary school adolescents of Ethiopia*. Table 5.7 displays the data and correlational analyses of the data obtained through one way ANOVA.

**Table 5.7: Inferential statistics of social competence scales and syndrome scales by ages through one way ANOVA**

		Sum of Squares	df	Mean Square	F	Sig.
Activities	Between Groups	1121.023	5	224.205	2.266	.047
	Within Groups	59078.977	597	98.960		
	Total	60200.000	602			
Social activities	Between Groups	622.595	5	124.519	1.248	.285
	Within Groups	59577.405	597	99.795		
	Total	60200.000	602			
Academic performance	Between Groups	872.461	5	174.492	1.756	.120
	Within Groups	57927.539	583	99.361		
	Total	58800.000	588			
Total competence	Between Groups	893.444	5	178.689	1.799	.111
	Within Groups	58806.556	592	99.335		
	Total	59700.000	597			
Anxiety/depressed	Between Groups	532.619	5	106.524	1.066	.378
	Within Groups	59367.381	594	99.945		
	Total	59900.000	599			
Withdrawn/depressed	Between Groups	714.259	5	142.852	1.434	.210
	Within Groups	59085.741	593	99.639		
	Total	59800.000	598			
Somatic complaints	Between Groups	471.829	5	94.366	.943	.452
	Within Groups	57028.171	570	100.049		
	Total	57500.000	575			
Social problems	Between Groups	155.341	5	31.068	.309	.908
	Within Groups	59344.659	590	100.584		
	Total	59500.000	595			
Thought problems	Between Groups	190.141	5	38.028	.378	.864
	Within Groups	59809.859	595	100.521		
	Total	60000.000	600			
Attention problems	Between Groups	273.219	5	54.644	.544	.743
	Within Groups	58926.781	587	100.386		
	Total	59200.000	592			
Rule-breaking behaviours	Between Groups	312.420	5	62.484	.623	.682
	Within Groups	56387.580	562	100.334		
	Total	56700.000	567			
Aggression behaviours	Between Groups	304.744	5	60.949	.607	.694
	Within Groups	58395.256	582	100.335		
	Total	58700.000	587			
Other problems	Between Groups	477.790	5	95.558	.955	.445

	Within Groups	58922.210	589	100.038		
	Total	59400.000	594			
	Between Groups	480.810	5	96.162	.961	.441
Internalising problems	Within Groups	58019.190	580	100.033		
	Total	58500.000	585			
	Between Groups	204.675	5	40.935	.407	.844
Externalising problems	Within Groups	56595.325	563	100.525		
	Total	56800.000	568			
	Between Groups	164.039	5	32.808	.326	.897
Total problems	Within Groups	59935.961	596	100.564		
	Total	60100.000	601			

Remark: *There are statistically significant differences among ages at  $p < .05$*

As indicated in Table 5.7, the one way ANOVA results indicated that there are no statically significant differences as a function of ages in all social competences subscales. Similarly, there is no statistical difference as a function of age amongst all syndrome subscales except minor differences in activity subscale ( $F=2.266$ ,  $P=0.047$ ).

#### 5.2.2.6 Research Hypothesis 4

The fourth hypothesis of this study states that *there is no significant relationship between social competence problems and syndrome problems by secondary school adolescents of Ethiopia*. Table 5.8 displays the data presented and analysed to yield responses for the stated hypothesis through a one way ANOVA.

**Table 5.8: Inferential statistics among social competences and syndrome scales**

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
<b>Activities</b>	1	.240**	.112**	.799**	-0.038	-0.07	-0	-0.05	.119**	0.06	.080*	0.055	.089*	-0.04	.089*	0.005
<b>Social activities</b>	.240**	1	.141**	.752**	0.009	-0.03	0.044	-0.05	.092*	-0.014	-0.01	0.058	.112**	0.033	0.049	0.012
<b>Academic performance</b>	.112**	.141**	1	.239**	-0.04	-0	-0.05	-.086*	.128**	-0.045	-0.02	-0.013	.100**	-0.05	-0.013	-0.06
<b>Total competence</b>	.799**	.752**	.239**	1	-0.019	-0.06	0.024	-.080*	.139**	0.017	0.044	0.061	.102**	-0	.081*	0.001
<b>Anxiety</b>	-0.04	0.009	-0.04	-0.02	1	*	.477**	.545**	.373**	.474**	.280**	.411**	.407**	.847**	.396**	.733**
<b>Withdrawn</b>	-0.07	-0.03	-0	-0.06	.402**	1	.264**	.387**	.387**	.358**	.174**	.343**	.261**	.642**	.281**	.580**
<b>Somatic complaints</b>	-0	0.044	-0.05	0.024	.477**	*	1	.408**	.310**	.360**	.279**	.346**	.370**	.762**	.347**	.627**
<b>Social problems</b>	-0.05	-0.05	-.086*	-.080*	.545**	*	.408**	1	.383**	.490**	.380**	.413**	.435**	.570**	.426**	.738**
<b>Thought problems</b>	.119**	.092*	.128**	.139**	.373**	*	.310**	.383**	1	.403**	.278**	.402**	.383**	.463**	.381**	.644**



					.358*												
<b>Attention problems</b>	0.06	-0.01	-0.05	0.017	.474**	*	.360**	.490**	.403**	1	.312**	.399**	.348**	.485**	.400**	.688**	
					.174*												
<b>Rule breaking</b>	.080*	-0.01	-0.02	0.044	.280**	*	.279**	.380**	.278**	.312**	1	.419**	.420**	.322**	.779**	.587**	
<b>Aggressive behaviours</b>	0.05				.411*	*	.343*	.346*	.413*				.535*	.458*	.882**		
	5	0.058	-0.01	0.061	*	*	*	*	.402**	.399**	.419**	1	*	*	.729**		
		.112*	-	.102*	.407*	.261*	.370*	.435*						.452*			
<b>Other problems</b>	.089*	*	.100**	*	*	*	*	*	.383**	.348**	.420**	.535**	1	*	.524**	.697**	
					.847*	.642*	.762*	.570*	.463*	.485*	.322*	.458*	.452*		.450**		
<b>Internalising problems</b>	-0.04	0.033	-0.05	-0	*	*	*	*	*	*	*	*	*	1	.828**		
<b>Externalising problems</b>					.396*	.281*	.347*	.426*	.381*	.400*	.779*	.882*	.524*	.450*			
	.089*	0.049	-0.01	.081*	*	*	*	*	*	*	*	*	*	*	1	.750**	
	0.00				.733*	.580*	.627*	.738*	.644*	.688*	.587*	.729*	.697*	.828*			
<b>Total problems</b>	5	0.012	-0.06	0.001	*	*	*	*	*	*	*	*	*	*	.750**	1	

*Remark: \*\* Correlation is significant at the 0.01 level (1-tailed)*

*\* Correlation is significant at the 0.05(1-tailed)*

Table 4.8 reveals that total social competence problems display a strong positive relation with activities, social activities, and to some extent with academic competences. In addition, the actualities are illustrated of a statistically significant relationship of total social competence problems with somatic complaints, thought problems, other problems and externalising problems. On the other hand, academic problems exhibit significant correlations with social problems (negatively) and thought problems (positively) of the subscales of internalising problems and other problems (negatively) of the subscales of total problems. Furthermore, almost all subscales of internalising problems indicate a statistically significant positive correlation with internalising problems. Besides, internalising and externalising problem subscales also have a statistically significant positive association with that of total problems.

## 5.4 CONCLUSION

This chapter demonstrated the presentation, analyses and interpretation of the collected and organised data. Accordingly, the results of the collected data were presented and analysed in a sequential order, depending upon the research questions and the corresponding stated hypothesis. The following unit of the study is Chapter six. Chapter six encompasses the findings, the conclusions and the recommendations as its main components. The introduction, summary and the limitations of the study also comprise part of the chapter.

## **CHAPTER SIX**

### **SUMMARY, FINDINGS, CONCLUSION AND RECOMMENDATIONS**

#### **6.1 INTRODUCTION**

In the previous chapter, data presentations, the analysis and the results of the data were offered. Eventually, as a consolidation processes the results were briefly summarised. This chapter also provides specific comparison of the findings of the current study with a number of findings obtained from other research works. In this chapter, the summary of the main findings, conclusions and recommendations of the study is presented and the limitations of the research work are given. The chapter ends by examining the findings for each of the research questions and applying the evidence that emerged from the findings.

The foremost purpose of this study was to investigate the prevalence of emotional and behavioural problems and their pitfalls among secondary school adolescents of Ethiopia. Specifically, the purposes of this research were to:

- Examine the social competence problems (activity problems, social activities problems and academic performance problems)
- Determine whether or not social competence problems vary according to gender groups.
- Examine the trends of emotional/internalising and behavioural/externalising problems among secondary school adolescents of Ethiopia
- Determine whether or not internalising and externalising problems vary according to sex and age among secondary school adolescents in the study area

- Examine the relationship displayed between age groups and emotional/internalising and behavioural/externalising problems by secondary school adolescents in the study area
- Analyse the relationships between social competence problems and categories and subcategories of emotional and behavioural/syndrome problems of secondary school adolescents of Ethiopia.

To search for answers to these basic research questions and to validate the stated research hypotheses, self-administrated questionnaires were used. These questionnaires were used under licence from ASEBA 2001 YSR and translated with permission. The survey data was gathered and analysed as previously described.

In this part, the summary and conclusion are briefly provided. Recommendations are made, based on the discussions and conclusions.

## **6.2 SUMMARY OF THE EMPIRICAL INVESTIGATION**

This study revealed that the overall emotional and behavioural problems of Ethiopian secondary school adolescents were found to be about 9% of the sample (9.77% and 8.47% amongst males and females respectively). Hence, it was observed that male adolescents recorded a slightly higher proportion of such issues than the corresponding female adolescents.

Concerning the prevalence of internalising and externalising behavioural problems of Ethiopian secondary school adolescents, it was found that 10.58% and 11.77% respectively suffered from internalising and externalising problems. The prevalence rate of internalising behavioural problems of females (11.58%) was higher than that of males (9.63%). Conversely, externalising behavioural problems of male adolescents (14.83%) considerably exceed those of female ones (8.60%). This implies that the male adolescents display more outward/externalising behavioural problems than female adolescents (rule-breaking behaviours 10.03% and 3.93%, aggressive behaviours 7.33% and 4.86% respectively). In contrast, female

adolescents were found to report more inward/internalising behavioural problems than male adolescents (anxiety/depressed 3.41% and 3.26%, somatic complaints 5.32% and 3.11%, social problems 4.47% and 2.68% respectively). However, in terms of withdrawal/depressed behaviours males were found to be higher than females (4.74% and 2.74%).

The one way ANOVA analyses indicated that there are statistically significant differences between males' and females' mean scores in all social competence subscales, except in the social activities subscale. These imply that in activities, academic performance and total competence problems, there were significant variations between the means of male (higher than female) and female participants.

Furthermore, the one way ANOVA indicated the existence of statistically significant differences between males' and females' means in anxiety/depression, rule breaking behaviours, aggressive behaviours, internalising and externalising problems. Nevertheless, in other subscales there were no statistically significant differences between the means of male and female participants. In general, the social competence subscales also have a statistically significant positive relationship with total social competence problems. Similarly, the syndrome subscales display a statistically significant positive interrelationship among themselves and with total problems. On the other hand, there are a number of negative correlations among social competence subscales, with some of the internalising and the externalising problem subscales.

To sum up, the social competence subscales demonstrated a statistically significant positive relationship among themselves and a statistically significant positive relationship with total social competence problems. On the other hand, the syndrome subscales reveal a statistically significant positive interrelationship with total problems.

### **6.3 SUMMARY OF THE FINDINGS OF THE EMPIRICAL INVESTIGATION**

A descriptive survey approach and a correlational approach were employed as the research method. The results of the study were elucidated in Tables 5.3 to 5.8. A discussion about the findings of the study is presented here in more specific and organised ways.

In this section the results regarding social competence problems of secondary school adolescents and their relations with sex groups and age are addressed. In addition, the tendencies of emotional/internalising and behavioural/externalising problems among Ethiopian secondary school adolescents and their relationship, displayed by sex groups and sex, are presented.

#### **6.3.1 Experience of social competence problems of secondary school adolescents**

Social competence/functioning problems encompassed activity problems, social activity problems and academic performance of individuals. In this regard the result of the study indicated that the social competence/functioning problems of secondary school adolescents of Ethiopia are to be concerned issues. In terms of activity problems, a considerable number of respondents (8.29%) were found to be in the clinical category. In particular, the female secondary school adolescents (11.53%) suffered more than males with regard to activity problems.

#### **6.3.2 The correlational relationship between sex groups and social competence problems among secondary school adolescents of Ethiopia**

As indicated in Table 5.3, it is observed that there are statistically significant correlational relationships between the means of female and male adolescents in all the competence scales, except that of social activities. The results of Table 5.3 and Table 5.4 ascertained that the female research participants' mean, in almost all the

social competence problems, excepting that of social activities scales, was statistically higher than that of the corresponding male research participants.

### **6.3.3 The prevalence of internalising and externalising problems among sex groups**

Multiple studies revealed that the prevalence of emotional and behavioural problems for children and adolescents was higher than expected and mental health issues were also a major concern. For example, the study result on the prevalence of behavioural and emotional problems of school going adolescents in Chandigarh Union Indian territory revealed that while 30% of adolescents were having emotional and behavioural problems, this was more prevalent for girls than boys, in all age groups (Pathak et al., 2011). Moreover, research based evidence projected that emotional and behavioural problems of adolescents range from 10% to 25% (Reijneveld et al. 2014). In the Western Cape Province of South Africa, about 15% of secondary school adolescents were identified as being at high risk of mental problems (Plüddemann et al., 2014). Similarly, in Ghana, Uganda, South Africa and Zambia about 20% of children and adolescents were suffering from mental disorders (Kleintjes et al., 2010). Additionally, Flisher et al., (2012) discovered and demonstrated similar conclusions to the above mentioned findings. Furthermore, the prevalence of emotional and behavioural problems in Algerian adolescents was also found to be higher than expected (Petot et al., 2008).

Furthermore, the analysis of the prevalence of emotional and behavioural problems of school going adolescents in India was found to be 21% (Saleem, & Mahmood, 2013). It was generalised that children aged 4–17 years old largely exhibited higher prevalence rate of emotional and behavioural problems (Pastor, Reuben & Duran, 2014). In general, the overall prevalence rate of emotional and behavioural problems among children and adolescents are higher than what may be expected. In general, children and adolescents who are suffering with emotional and behavioural problems accounted for 10 to 20% in the worldwide (LV et al., 2015).

This study revealed the overall emotional and behavioural problems of Ethiopian secondary school adolescents to be about 9%, of which 9.77% were male and 8.47% female research participants. Therefore, in contrast to the experiences of other countries, the overall prevalence rate of emotional and behavioural problems of the Ethiopian secondary school adolescents is found to be lower than and/or closer to the lower limit of the worldwide prevalence rate of such problems that were estimated and forecast. This is nearly compatible with the longitudinal study findings of Chinese adolescents, where the overall prevalence of emotional and behavioural problems was 10.7% and which was concluded to be a low prevalence in contrast to other countries (Wang, et al., 2013). However, this does not mean that the problems need to be neglected; rather, they need to be dealt with as early as possible. This may help the problem from developing into worse conditions where controlling and regulating behaviour may be more difficult.

One of the reasons mentioned for the higher prevalence of these types of problems is the increase in urbanisation (Pathak et al., 2011). That seems to be a more understandable reason why the percentage of Ethiopian secondary school adolescents with emotional and behavioural problems is found to be lower than in other countries. This is because nearly 85% of the population of the country's inhabitants are rural dwellers. In other words, the Ethiopian population is predominantly an agrarian society (MOE, 2008). Hence the majority of the Ethiopian teenagers are more or less living in an agrarian environment. This in turn provides better opportunities for children to interact with their peer groups as freely as they can. The opportunities of involvement with peers for freedom in experiencing, partaking and practicing being in groups allows children to adapt to the group norms.

Furthermore, religious norms might be other contributory factors for influencing and controlling certain emotional and behavioural problems. Most Ethiopians adhere to religious doctrines; as a result, they are accustomed to attribute the challenges and solutions to their Creator (God or Allah). I strongly believe that this is a very worthy self-protection or defence mechanism. In other words, this mechanism might assist the mind to be free of anxiety, depression, worrying, anger and the like. Such attribution practices are considered as the fundamental components of emotional

and behavioural problems as discussed in different sections of the study. If so, this attribution assists those who are accustomed to do so to be relieved from emotional and behavioural problems, possibly in a relatively shorter period of time since they shift the cause and the solution (to God or Allah).

Concerning the prevalence of internalising and externalising behavioural problems of Ethiopian secondary school adolescents, while this was found to be relatively lower in contrast to many countries, it nonetheless represents a considerable proportion of the population suffering from emotional and behavioural problems. On the other hand, dimensions, the prevalence rate of internalising behavioural problems of female adolescents was higher than that of males. Conversely, externalising behavioural problems of male adolescents exceeds those of female adolescents as clearly indicated in Table 5.6. This implies that the Ethiopian male adolescents are displaying more outward/externalising behavioural problems than females (rule-breaking behaviours and aggressive behaviours). Contrary to this, the female students were identified as having more inward/internalising behavioural problems than boys (anxiety/depressed, somatic complaints). However, in withdrawal/depressed behaviours, males reported higher rates than females (4.74% and 2.74% respectively). Correspondingly, others' research findings have also shown that the males' rate of externalising problems is higher than females while, conversely, females' prevalence rate of internalising problems was higher than males (Laukkanen et al., 2002; Rescorla et al., 2007; Fanti, Panayiotou & Fanti, 2011; Pathak et al., 2011; Risper, 2012); this is similar to the current research findings.

Furthermore, evidence indicated that boys received higher scores on externalising problems such as aggressive behaviour while girls received higher scores for internalising problems, such as somatic complaints and anxious/depressed behaviours (Rescorla et al., 2007). Likewise, female adolescents' scores were higher than males on anxious/depressed, withdrawn/depressed, somatic complaints, attention problems and thought problems subscales, while males scored higher than females on the rule-breaking subscale (Bartels, van de Aa, Beijsterveldt, Middeldorp & Boomsma, 2011).



The prevalence rates among males and females as regards the current research findings are more or less comparable to many other research findings as mentioned above. The prevalence rates for internalising are higher among females than males while conversely the proportion of males is found to be higher than that of females in externalising problems. It was also revealed that slighter differences on just a few subscales were detected than in many other research findings. For instance, it was identified that males' scores were higher than females on the case of withdrawn/depressed scales in the current study. In this regard, the research outcomes by Bartels, et al. (2011) showed that females scores were higher than the males in withdrawn/depressed and other researchers also indicated the above.

#### **6.3.4 The correlational relationship of internalising and externalising problems among Ethiopian secondary school adolescents and the relationship among sex groups**

In the correlational relationship, it was discovered that statistically significant differences were detected between the means of males and females concerning problem behaviours, which resulted in the mean scores of females scores being greater than the corresponding males in internalising problems, whereas inversely, males had a significantly mean score than females in externalising problems, which is similar to the research finding by Lv et al. (2015) and others mentioned in section 6.3.3. Furthermore, in the current research better statistical significant variations were determined between the means' scores of males and females from the internalising problems subscale, anxiety/depression and from the externalising problems subscales, both in rule-breaking behaviours and in aggressive problems. In other subscales of the internalising problem subscale, no statistically significant variations were demonstrated.

To sum up, there is a statistically significant relationship that was discovered among males and females in internalising and externalising problems; the mean scores of female adolescents was significantly greater than the mean scores of males in internalising problems. On the other hand, the mean scores of male adolescents were significantly greater than those of the females in externalising problems.

### **6.3.5 Correlational relationship between age groups and emotional and externalising problems**

Many of the studies reviewed indicated the existence of correlational relationships between ages and emotional and behavioural problems. Nevertheless, the findings of this study demonstrated that there are no significant correlational relationships between the ages of research participants with any of the emotional or behavioural problem subscales, unlike the other research findings. For instances, Risper (2012) described the manifestation of a strong positive relationship between internalising problems and ages. The current research findings are contrary to other research findings which indicate that there is no statistically significant difference as a function of age with either the competence or syndrome scales.

### **6.3.6 Correlational relationship between social competence and syndrome scales**

On the other hand, research by Barriga et al. (2002) demonstrated that withdrawal, somatic complaints, attention problems, delinquent behaviour and aggressive behaviour scales revealed statistically significant correlations with academic performance, while anxiety/depression, social problems, and thought problem scales displayed no significant relationship with academic performance. Nevertheless, the current research finding evidenced academic performance problems as having a statistically significant correlation relationship just with social problems, thought problems and other problems from syndrome problem scales. However, academic performance has a statistically significant relationship with all social competence scales: activities, social activities and generally with total competence problems.

Furthermore, concerning the relationships between problem scales and academic achievements of adolescents, different research findings produced different results. For instance, McLeod et al., (2012) reported that depression, attention problems and delinquency were the major problems that influenced the academic achievements of students. From internalising problems such as depression and anxiety, to externalising problems such as conduct disorder and impulsive behaviours, these

researchers established a relationship with academic achievements. On one hand, attention problems that executed a remarkable relation with the academic performance of students rather than any other behavioural problems either from externalising or internalising problems have a direct relationship to academic performance (Barriga et al., 2002). In this regard, it is known that only attention problem that imposed a profound influence on the academic performance of adolescents. On the other hand, other variables such as anxiety/depression and somatic complaints have no direct effect on academic performance except by being facilitated or mediated by attention problems; which means that anxiety/depression by themselves contribute a great role to the emergence of attention problem (Lv et al., 2015).

Moreover, it has been confirmed that attention problems particularly correlated very strongly with internalising problems and social problems (Lv et al., 2015). Nevertheless, in the current research, attention problems correlated with most internalising and externalising problems; however no significant correlational relationships were found with social competence problems subscale.

In general, different studies revealed the existence of variations in the prevalence of emotional and behavioural problems among adolescents of different countries. Furthermore, the prevalence of both emotional and behavioural problems of adolescents presumed to be extensive. Therefore, this finding also provided clear evidence that consideration and planning should be given to dealing with these issues. Therefore, any concerned parties of the government or nongovernment working at different hierarchical levels in the country who have responsibilities in this area should use their roles to ensure the normal growth and development of children and adolescents. Overall, the findings of the study showed the importance of the problems and emphasised that the issues should be dealt with very carefully and critically as these significant problems call for attention.

## 6.4 RESEARCH CONCLUSIONS

Based on the evidence of this research study, it is possible to reach conclusions. Many researchers have contended that emotional and behavioural problems as well as internalising and externalising problems were extensive amongst adolescents (Walker, Robinson, Adermann & Campbell, 2014; Pastor et al., 2014). It was generally considered that 10% to 20% of the world's adolescents are suffering from emotional and behavioural problems. These problems are also expected to have adverse effects on the academic, social and emotional difficulties of adolescents (Saleem & Mahmood, 2013) which if left untreated could have the potential to affect a person's abilities to perform in school, activities, social relationships and achieve their life goals too (Terzian, et al. 2011). They might also contribute to failure in academic endeavours, failure to maintain social relationships with peers and others (Busari, 2014). In sum, emotional and behavioural problems are key health issues in adolescence (Wang, Liu & Wang, 2013).

The major conclusions of the study are presented part by part here, based on the identified research questions and the stated hypotheses in Chapter four.

Based on the results of the study as presented in Table 5.3, concerning the prevalence of social competence problems of secondary school adolescents of Ethiopia, the following conclusions are drawn:

- In terms of activity problems, a considerable number of respondents (8.29%) were found to be in the clinical category, especially the female secondary school adolescents (11.53%) who were suffering more than males regarding activity problems.
- Regarding social activity problems, neither sex was considered to be in the clinical category. However, a considerable number of respondents were found to be in in the borderline class (6.64%). The borderline category was not considered as a normal category or a clinical one but fell between the

- two categories and was transitional from normal to clinical.
- Concerning academic performance problems, a specific number of respondents (5.26%) was facing difficulties, with slightly more female than male research participants.
- In general, a considerable number of adolescents (9.87%), particularly more female adolescents (12.63%), were found to be suffering from social competence problems. In addition, a significant number (6.86%) were in the borderline category.

In consequence, it can be concluded that a significant number of secondary school adolescents of Ethiopia were experiencing social competence problems. Therefore, these problems call for attention, and at least those school adolescents who are suffering from the problems need to be assisted by the appropriate person so as to overcome the problems from which they are suffering.

The ANOVA data analysis results provided in Table 5.4 reported on the existence of relationships between males and females and social competence scales and subscales. In this regard, the following conclusions are arrived at:

- There are statistically significant differences between males' and females' mean scores in activities problems ( $F = 25.44$  ,  $P = 0.00$  )
- There was no statistically significant difference between males' and females' mean scores in social activities problems ( $F = 1.619$ ,  $P = 0.204$  )
- There were statistically significant differences between males' and females' mean scores in academic performance problems ( $F= 5.1132$  ,  $P= 0.024$ )
- There were statistically significant differences between males' and females' mean scores in total social competence problems ( $F= 17.835$ ,  $P= 0.00$ ).

In general, there are statistically significant differences between males' and females' mean scores in all competence subscales except in the social activities subscale. In

other words, it was found that female research participants had greater problems than males in activities, academic performance and in total competence problem scales, based on the results indicated in Table 5.3 as well as Table 5.4. This implies that female adolescents in these secondary schools of Ethiopia were significantly more affected than males in activities, academic performance and total competence problems.

The data analysis results reported in Table 5.5 indicated a prevalence of emotional and behavioural problems as well as internalising and externalising problems. Based on the results of the study the following conclusions are drawn.

- The prevalence of emotional and behavioural problems of Ethiopian secondary school adolescents was found to be a considerable issue. On the other hand, the borderline group also demands consideration. This is because of a large number of respondents were found in this classification.
- The prevalence of internalising problems of Ethiopian secondary school adolescents was found to be of substantial concern. Besides, the borderline category was also a matter that calls for attention due to the sizeable number of research participants belonging to this category.
- The prevalence of externalising problems of Ethiopian secondary school adolescents was found to be an important matter. Furthermore, the borderline category was similarly another problem that requires consideration due to the significant proportion of the research participants who belong to the category.

In general, this conclusion implies that the secondary school adolescents of Ethiopia were also suffering with emotional/internalising and behavioural/externalising problems. Indeed, all these variables which account for nearly 10% of the respondents belong to the clinical classification as well as a significant number of respondents who were also classified in the borderline category. Of necessity, the

major emphasis of this study was placed on the clinical category but the size of the borderline category is also substantial and calls for consideration.

The result of the one way ANOVA as indicated in Table 5.6 verified the relationship amongst these different variables as indicated in the second research hypothesis. Therefore, from these results, the following conclusions are drawn:

- There are statistically significant differences between male and female adolescents in internalising behavioural problems ( $F= 15.24$ ,  $P=0.00$ ). The anxiety/depression ( $F= 9.646$ ,  $P= 0.02$ ) was clearly indicated in one of the internalising behavioural problem subscales.
- Statistically significant differences between sex groups and externalising problems ( $F= 15.245$ ,  $P=0.00$ ) were discovered. Similarly, a significant difference was observed between the two groups in rule breaking behaviours ( $F= 17.436$ ,  $P=0.00$ ) and aggressive subscales ( $F= 7.438$ ,  $P=0.007$ ) which comprise the component of externalising problems.
- No statistically significant differences were found in the other subscales between the sex groups and the components of internalising behavioural problems.

Generally, the one way ANOVA results displayed the existence of statistically significant differences between sex groups in anxiety/depression, rule breaking behaviours, aggressive behaviours, internalising and externalising problems. Nevertheless, no statistically significant differences were observed between the male and female participants of the study, with other internalising problem subscales.

The results of Table 5.4 and Table 5.6 revealed that females were recording higher mean scores in internalising problems, specifically in anxiety/depression, contrary to males. Conversely, males were found to be having more problems in externalising problems in both rule-breaking and aggressive behaviours, than females.

The result of the one way ANOVA as indicated in Table 5.7 displayed the types of relationships that exist between age and social competence problems and syndrome

problems. Therefore, based on the results obtained from the analysis of the data, the following conclusion is drawn:

- There is no statistically significant relationship between age and social competence and syndrome scales exhibited by secondary school adolescents of Ethiopia.

Therefore, it can be generalised that age groups or variation have no significant relationship to any of the internalising or externalising problems subscales. Additionally, age had no association with any of the emotional or the behavioural problems subscales.

The result of the one way ANOVA as indicated in Table 5.8 displayed the types of relationships that exist among these different variables of the social competence scale and subscales with syndrome scales and subscales. Therefore, based on the results of the analysed data, the following conclusions are drawn:

- Academic performance problems have a statistically significant correlation relationship just with social problems, thought problems and other problems from syndrome problem scales
- Academic performance problems have a statistically significant relationship with all social competence scales: activities, social activities and with total competence problems.
- Attention problems correlated with most internalising and externalising problems; however no significant correlational relationship was connected with the social competence problems subscale.

In general, the social competence subscales exhibit statistically significant positive relationships among themselves and with total social competence problems. On the other hand, the syndrome subscales display statistically positive relationships among themselves and with total problems. In short, there are a number of negative



correlations among social competence subscales with regard to some of the internalising and the externalising problem subscales.

To sum up, this study revealed that the overall emotional and behavioural problems of Ethiopian secondary school adolescents were found to be somewhat less than in many other countries (for instance, South Africa, Ghana, Uganda, Zambia and India, which range from 15% to 21% — see Plüddemann et al., 2014; Saleem & Mahmood, 2013; Kleintjes, Lund & Flisher, 2010; Flisher et al., 2012). Furthermore, the prevalence rate of internalising behavioural problems of females was higher than that of males, conversely the externalising behavioural problems of male adolescents higher than female adolescents. In the activities, academic performance and total competence subscales, statistically significant variations were notified between males' and females' means. Moreover, significant discrepancies were found between males and females' means in anxiety/depression, rule breaking behaviours, aggressive behaviours, as well as internalising and externalising problems. Similarly, social competence subscales have, statistically significantly positive interrelationships among themselves as well as with total social competence problems. On the other hand, the syndrome subscales have a statistically positive interrelation with total problems. In short, there are certain negative correlational relationships among social competence subscales with some of the internalising and the externalising problem subscales.

## **6.5 RECOMMENDATIONS FROM THIS RESEARCH**

Emotional/internalising and behavioural/externalising problems have an influence on day- to-day aspects of adolescents' lives in the wider range of their abilities, such as engaging with education, relationships among friends and family as well as constructing their own world, and this makes it a critical concern to maintain the well-being of adolescents through prevention and intervention (Hagell, 2014). In this regard, the present research has pointed out that unless appropriate prevention and diagnostic measures are taken to tackle the emotional and behavioural problems of adolescents of secondary school in Ethiopia, their situation might worsen and may affect different functioning aspects of those adolescents who are suffering from the

said problems as indicated in the concluding section of the research. However, these measures need to initiate urgently for early detection and actions.

To sum up, based on the results reported in Table 5.3 and Table 5.4, it was concluded that a considerable number of school adolescents in Ethiopia are suffering from social competence problems (activity problems, academic performance and in social competence problems) in general, but females in particular. The prevalence of emotional/internalising and behavioural/externalising problems is also as indicated in Tables 5.5 and 5.6 as significant numbers of Ethiopian secondary school adolescents, particularly, more females suffer from internalising behavioural problems while more of the male adolescents suffer from externalising behavioural problems. Thus, the following recommendations are proposed as a way to alleviate the problems identified by this research.

- Primarily, professional/school guidance and counselling services should be strengthened and expanded in every school of Ethiopia. Accordingly, the government as well as the regional educational bureaus need to give attention to assigning/employing guidance teachers and counsellors at every secondary school and to furnishing conducive situations for the work to be performed properly and efficiently. This is because guidance and counselling services are very likely to help the learners, the staff, the school administration and the community to solve their problems in general. This is possible, because through appropriate counselling services, individuals with issues such as thinking, emotional or behavioural problems can be well supported and assisted (Sharf, 2012). Therefore, it is recommended that professional guidance teachers and counsellors need to be assigned to render the counselling services required in schools on a larger scale.
- The schools need to collaborate with the school counsellors, health professionals, and nongovernmental organisations who are working with adolescents so as to provide schools with basic mental health services. In this regard, Risper (2012) has pinpointed the fact that mental treatment services and counselling are important requirements of the schools as well

as other school communities to improve and assist students with mental health problems.

In general, pronounced efforts should be made by all concerned bodies to fulfil and render guidance and counselling services in the school using suitable and qualified individuals. Through appropriate guidance and counselling services it might be possible to improve the mental health problems of adolescents.

- A considerable number of school adolescents are suffering from emotional and behavioural problems which are exacerbated in the family environment; as a result this requires establishing school based mental health services to alleviate the problems (Pathak et al., 2011). From the very beginning, the individual is influenced by the environment as well as influencing it, especially by the family which plays a dominant role in individual development (Rosa & Tudge, 2013). Besides, different situations in which individuals have direct roles, experiences and interaction with e.g., siblings, have considerable effect on the healthy development of individuals (Neal & Neal, 2013). Whatever the root cause of the problems, without the involvement of parents in working to solve the emotional or behavioural problems of adolescents, mental health service programmes cannot be effective. As a result, in a coordinated structure, providing mental health services in the school as mentioned by Pathak et al. (2011) is a significant, indeed crucial, measure. Therefore, the Ministry of Education, Regional Education Bureau, Woreda Educational Office, the schools and other sectors concerned are very significant and it is vital that they work in collaborative efforts on these concerns. The parents and teachers' associations need to play their parts too.
- Similarly, mobilising parents and creating awareness to contribute their parental roles in the normal way of nurturing their children's development is a very important concept. As a result, a mass movement programme should be devised by the government (federal and regional governments), the Ministry of Education and Regional and Educational bureaus and each

level of public organisations and administration, whether political or civic servants. Health extension programmes and works would be able to perform their roles in this regard, because in the context of Ethiopia, health extension works have extended links with most parents in the country.

- From the very beginning, media, parents and schools are supposed to help and assist adolescents to develop a sense of “I can” and develop confidence or identity formation. Helping adolescents to develop strong and firm intentions towards their education is important, because failure in education or ways of dealing with school activities and practices may be sources of frustration, anxiety and the like. This could also be achieved by developing a sense of competency and eagerness for success from the very beginning. Such students must learn success from the very beginning as it is said that “success leads to success”. Therefore, at every school level these types of services are supposed to be provided by school community, parents, and different mass media as well.
- Stakeholders should encourage parents to develop firm and strong relationships with the school and to mentor and follow-up the progress and efforts of their children there. The schools and Woreda education offices have to devise planned schedules to discuss the students’ self-regulation progress with the parents, while as regards school related problems, actions need to be taken to improve the schooling programme and the mental health of the students. Teachers also need to be very involved in understanding their students as much as possible, at least their problems, living conditions and status, and the like. If possible, they should talk with each student in the programme, individually and in groups. Such plans and actions need to be strengthened, because from the relationships of teachers and students, an understanding of each other and a sense of helping one another would be developed.
- As a concluding remark, it can be generalised that, since promotion of self-regulatory functioning of adolescents – various cognitive and affective practices that are related with planning, impulse controlling, and emotion

regulation – is helpful in improving problematic problems of adolescence, the participation of trained parents in family intervention programmes results in worthwhile values and good impacts (Mason et al., 2016). These may assist the adolescent to develop emotional self-regulation that may be of paramount importance in stabilising the disabling effect of lack of regulation on the functioning of adolescents. In general, self-regulation is a strategy that is used to systematically handle the emotional state of individuals so as for them to feel and act comfortably (Berk, 2012).

## **6.6 LIMITATIONS OF THE STUDY**

It is obvious that all research activities are not free of shortcomings. One of the limitations of this study is that it was confined just to secondary school adolescents, but adolescents might not be situated just in secondary schools but also in primary schools, especially grades 7 and 8,. In this regard adolescents of all age groups from different levels of schools were not included, which might be a limitation in generalising to all adolescents in Ethiopia. Furthermore, the study focused on a small area of the country as well as a single national regional state of Ethiopia out of nine national regional states and it covered only eight secondary schools found in East Showa Administrative Zone. Additionally, the sampling size was also small, comprising 603 respondents. Therefore, generalisation to the larger population with different backgrounds may not be possible.

## **6.7 RECOMMENDATIONS FOR FURTHER STUDY**

The following issues are suggested for future research:

- Females, especially with regard to internalising problems as well as the males with regard to externalising problems were observed to encounter and report more problems. The root causes of these variations are not covered in this study. Therefore, this is one of the recommended future research topics.

- The DMS orientation issues of secondary school adolescents of Ethiopia are not dealt with in this study. Therefore, they offer another possible future research area.
- Furthermore, the problems of emotional and behavioural problems of private secondary schools as well as elementary and preparatory adolescents were not considered in the current research. Investigations into those issues are recommended in future studies.

## **6.8 CONCLUSION**

School adolescents need to be well nurtured citizens who display readiness to shoulder the duties and responsibilities vested in them by the society as well as the country. The media, schools, the government as well as the community and parents need to play leading roles in shaping adolescents and capacitate the full potential of adolescents. These dreams come to reality if the adolescents are nurtured and developed while mentally and psychologically healthy. The reasons for this study are related to one of the issues that might hamper the functioning of adolescents. Furthermore, these issues are crucial mental health problems of adolescents which might affect the adolescents from exploiting their full potential.

## LIST OF REFERENCES

- Achenbach, T., & Rescorla, L. (2001). *Manual for the ASEBA school-age forms & profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, & Families.
- Achenbach, T., Dumenci, L., & Rescorla, L. (2002). Ten-year comparisons of problems and competencies for national samples of youth: Self, parent, and teacher reports. *Journal of Emotional and Behavioural Disorders*, 10(4), 194-203.
- Adeusi, S., Gesinde, A., Alao, A., Adejumo, G., & Adekeye, A. (2015). Differential effect of behavioural strategies on the management of conduct disorder among adolescents in correctional centres in Lagos State, Nigeria. *International Journal of Psychology and Counselling*. 7(4), 63-68. DOI: 10.5897/IJPC2015.0304
- Agency for Healthcare Research and Quality. (2012). Attention deficit hyperactivity disorder in children and adolescents: Clinical research summary. *Advancing Excellence in Health Care*.
- Akers, J. Jones, R. & Coyl, D. (1998). Adolescent friendship pairs: Similarities in identity status development, behaviors, attitudes, and intentions. *J. Adolesc. Res*, 13,178–201.
- Alemayehu, T. (2012). Assessment of students' misbehaviour and coping strategies in the case of Shashemene secondary school. Master's thesis, unpublished: Addis Ababa University.
- American Academy of Child and Adolescent Psychiatry. (2009). Oppositional defiant disorder: *A guide for families*. Retrieved from <http://www.aacap.org>.

- American Academy of Child and Adolescent Psychiatry. (2013). Conduct disorder: Facts for *families*, 33 (8/13). Retrieved from <http://www.aacap.org>.
- American Academy of Child and Adolescent Psychiatry. (2013). Oppositional Defiant Disorder (ODD): Revised. Vermont Family Network. Retrieved from <http://www.aacap.org>.
- American Psychological Association. (2002). Developing adolescents: A reference for professionals. Retrieved from [www.apa.org/pi/pii/develop.pdf](http://www.apa.org/pi/pii/develop.pdf).
- American Psychological Association. (2013). Somatic symptom disorder. American Psychiatric Publishing. Retrieved from [www.psychiatry.org](http://www.psychiatry.org).
- Barriga, A., Doran, J., Newell, B., Morrison, E., Barbetti, V., & Robbins, B. (2002). Relationships between problem behaviors and academic achievement in adolescents. *The Unique Role of Attention Problems*, 10(4), 233–240.
- Bartels, M., Van De Aa, N., van Beijsterveldt, C., Middeldorp C., Dorret, I., & Boomsma, D. (2011). Adolescent self-report of emotional and behavioural problems: Interaction of genetic factors with sex and age. *J Can Acad Child and Adolescent Psychiatry*, 20(1), 35-52. Boston: McGraw-Hill.
- Berk, L. (2012). *Child development* (9th ed.). Boston: Pearson.
- Bernstein, D., Nash, P., Clarke-Stewart, A., Penner, L., & Roy, E. (2008). *Essentials of psychology* (4th ed.). New York: Houghton Mifflin Company.
- Beyene, G. (2016). Disciplinary problems of students in government secondary schools of Arada sub-city in Addis Ababa city government. Master's thesis, unpublished: Addis Ababa University.
- Bhattacharjee, A. (2012). *Social science research: Principles, methods, and practices* (2nd ed.). Florida: University of South Florida, Tampa.



- Bongers, I., Koot, H., Ende, J., & Verhulst, F. (2002). The normative development of child and adolescent problem behavior. *Journal of Abnormal Psychology*, 112(2), 179–192. DOI: 10.1037/0021-843X.112.2.179.
- Bordin, A., Rocha, M., Paula, C., Teixeira, M., Achenbach, T., Rescorla, L., & Silveiras, E. (2013). Child Behavior Checklist (CBCL), Youth Self- Report (YSR) and Teacher's Report Form (TRF): An overview of the development of the original and Brazilian versions. *Cad. Saúde Pública, Rio de Janeiro*, 29(1), 13-28.
- Bowker, J., & Raja, R. (2011). Social withdrawal subtypes during early adolescence in India. *J Abnorm Child Psychol*, 39, 201–212. DOI: 10.1007/s10802-010-9461-7
- Brown, K., Cozby, P., Kee, D., & Worden, P. (1999). *Research methods in human development* (2nd ed.). California: Mayfield Publishing Company.
- Busari, A. (2014). Fostering desirable behaviour among secondary school adolescents with emotional and behavioural disorders (EBD): The contributions of positive behavioural intervention. *International Journal of Psychology and Behavioral Sciences*, 4(3), 98-105. DOI: 10.5923/j.ijpbs.20140403.03
- Carlson, N. (2013). *Physiology of Behaviour* (11th ed.). New Jersey: Pearson Education.
- Children's Mental Health Ontario. (2001). Evidence based practices for conduct disorder in children and adolescents. Retrieved from <http://www.cmho.org>
- Cohen, L., Manion, L., & Morrison, K. (2007). *Research methods in education* (6th ed.). New York: Routledge.

- Collishaw, S., Maughan, B., & Goodman, R. (2004). Time trends in adolescent mental health. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 45(8), 1350-1362. doi:10.1111/j.1469-7610.2004.00842.x10.1111/j.1469-7610.2004.00842.
- Connell, A. M. (2009). *A series of research and policy publications of the Schubert Center for child studies*. Cleveland, OH: College of Arts and Sciences, Case Western Reserve University.
- Cooley, S., Elenbaas, L., & Killen, M. (2012). Moral judgments and emotions: Adolescents' evaluations in intergroup social exclusion contexts. *New Dir Youth Dev.*, 136, 41–49. doi:10.1002/yd.20037.
- Coolican, H. (2014). *Research methods and statistics in psychology* (6th ed.). London: Taylor & Francis.
- Costello, E., Egger, H., Copeland, W., Erkanin, A., & Angold, A. (2011) In W. Silverman & A. Field (Eds.), *The developmental epidemiology of anxiety disorders: Phenomenology, prevalence, and comorbidity* (56-75). Cambridge: Cambridge University Press.
- Creswell, J. (2009). *Research design: Qualitative, quantitative, and mixed method approaches* (3rd ed). Los Angeles: Sage Publications.
- Crone, E., & Dahl, R. (2012). Understanding adolescence as a period of social-affective engagement and goal flexibility. *Review*, 3, 636-650.
- Dacey, J., & Travers, J. (2009). *Human development across the lifespan*. (7th ed.) New York: McGraw-Hill.
- Dacey, J.S & Travers, J.F. (2009). *Human development across the lifespan*. (7th ed.) New York: McGraw-Hill.

- Dawson, C. (2002). *Practical research methods: A user-friendly guide to mastering research techniques and projects*. Oxford: How to Books Ltd.
- Dearing, E. McCartney, K., & Taylor, B. (2006). Within-child associations between family income and externalising and internalising problems. *Developmental Psychology*, 42(2), 237–252. DOI: 10.1037/0012-1649.42.2.237.
- Dirks, M., Persramb, R., Recchia, H., & Howe, N. (2015). Sibling relationships as sources of risk and resilience in the development and maintenance of internalising and externalising problems during childhood and adolescence. *Clinical Psychology Review*, 42, 145–155. Retrieved from <http://dx.doi.org/10.1016/j.cpr.2015.07.003>
- Eisenberg, N., & Morris, A. (2004). Moral cognitions and prosocial responding in adolescence. In M. Lerner & L. Steinberg (Eds.). *Handbook of adolescent psychology* (2nd ed., 155-188). New Jersey: John Wiley & Sons.
- Ellison, A. (2004). Attention deficit/hyperactivity disorders (ADHD): *Encyclopedia of applied psychology*, 1:225-231. Oxford: Elsevier Academic
- Erikson, E. (1977). *Children and society*. London: Paladian Grafton Books.
- Evan, S., Williams, A., Schultz, B., & Weist, M. (2004). Behavioral assessment in schools. In C. Spielberger, (Ed.). *Encyclopedia of applied psychology*, 1, 265-301. Oxford: Elsevier Academic
- Fanti, K, Panayiotou, G., & Fanti, S. (2011). Associating parental to child psychological symptoms: Investigating a transactional model of development. *Journal of Emotional and Behavioral Disorders* 21(3), 193–210. [sagepub.com/journalsPermissions.nav](http://sagepub.com/journalsPermissions.nav) DOI: 10.1177/1063426611432171 [jebd.sagepub.com](http://jebd.sagepub.com).

- Feldman, R. (2018). *Development across the life span* (8th ed.). Vivar, Malaysia: Pearson Education.
- Field, A. (2009). *Discovering statistics using SPSS* (3rd ed.). Los Angeles: Sage Publications.
- Flisher, A.J., Dawes, A., Kafaar, Z., Lund, C., Sorsdahl, K., Myers, B., Thom, R., & Seedat, S. (2012). Child and adolescent mental health in South Africa. *Journal of Child and Adolescent Mental Health, 24*(2), 149–161.  
<http://dx.doi.org/10.2989/17280583.2012.735505>.
- Forlin, C., & Chambers, D. (2003). Bullying and the inclusive school environment. *Australian Journal of Teacher Education, 28*(2), 1-14.  
<http://dx.doi.org/10.14221/ajte.2003v28n2.2>
- Frick, P. (2016). Current research on conduct disorder in children and adolescents. *South African Journal of Psychology, 46*(2), 160–174. DOI: 10.1177/0081246316628455, [sap.sagepub.com](http://sap.sagepub.com)
- Furlong, M., Soliz, A., Simental, J., & Greif, J. (2004). Bullying and abuse on school campuses: *Encyclopedia of applied psychology, 1*:295-301. Oxford: Elsevier Academic.
- Gielen, U.P., & Roopnarine, J.L. (2016). *Childhood and Adolescence: Cross-Cultural Perspectives and Applications* (2nd ed.). California: ACB-CLIO.
- Girard, J., Wright, A., Beeney, J., Lazarus, S., Scott, L., Stepp, S., & Pilkonis, P. (2017). Interpersonal problems across levels of the psychopathology hierarchy. *Comprehensive Psychiatry, 79*, 53–69. Retrieved from <http://dx.doi.org/10.1016/j.comppsy.2017.06.014>.
- Goodwin, C. (2010). *Research in psychology: Methods and design* (6th ed.). Crawfordsville: John Wiley & Sons.

- Graber, J. (2004). Internalising problems during adolescence. In R. Lerner & L. Steinberg (Eds.). *Handbook of adolescent psychology* (2nd ed.). 587-626. Hoboken, New Jersey: John Wiley & Sons, Inc.
- Gronlund, N., & Linn, R. (1990). *Measurement and evaluation in teaching* (6th ed.). New York: Macmillan.
- Gross, R. (2005). *Psychology: The science of mind and behaviour*, (5th ed.). London: Publisher.
- (1994). Federal Democratic Republic Government of Ethiopia Education and Training policy. Addis Ababa: St. George.
- Hagell, N. (2014). Adolescent mental health AYPH research update (Summary version). Association for Young People's Health. Retrived from [http://www.youngpeopleshealth.org.uk/wp-content/uploads/2015/07/533\\_Mental-health-RU-Feb-2014-public.pdf](http://www.youngpeopleshealth.org.uk/wp-content/uploads/2015/07/533_Mental-health-RU-Feb-2014-public.pdf)
- Hague, P. (2006). *Practical guide to marketing research*. UK: Grosvenor House.
- Hall-Lande, J., Eisenberg, M., Christenson, S., & Neumark-Sztainer, D. (2007). Social isolation, psychological health and protective factors in adolescence. *Adolescence*, 42(166), 265-286.
- Harder, v., Mutiso, V., Khasakhala, L., Burke, H, Rettew, D, Ivanova, M., & Ndeti, D. (2014). Emotional and behavioral problems among impoverished Kenyan youth: Factor structure and sex-differences. *J Psychopathol Behav Assess*, 36(4), 580–590. Doi: 10.1007/s10862-014-9419-0.
- Hart, D., & Carlo, G. (2005). Moral development in adolescence. *Journal of Research on Adolescence*, 15(3), 223–233.

- Hart, S., Hodgkinson, S., Belcher, H., Hyman, C., & Cooley-Strickland, M. (2013). Somatic symptoms peer and school stress, and family and community violence exposure among urban elementary school children. *J Behav Med*, 36:454–465. DOI 10.1007/s10865-012-9440-2.
- Hashmi, S. (2013). Adolescence: An age of storm and stress. *Review of Arts and Humanities*, 2(1), 19-33. Retrieved from [www.aripd.org/rah](http://www.aripd.org/rah).
- Hauser-Cram, P., Nugent, J., Thies, K., & Travers, J. (2014). *The development of children and adolescents*. Hoboken: John Wiley & Sons.
- In-Albon, T. (2013). State of research on internalising disorders in children and adolescents: Is it still in its infancy? *Review article*, 1-11. Retrieved from <https://pdfs.semanticscholar.org/78e9/717fe064a3b1721ce8f7d5de764573afa830.pdf>
- Ivanova, M., Achenbach, T., Rescorla, L., Dumenci, L., Almqvist, F., Bilenberg, N., ...Verhulst, F. (2007). The generalizability of the Youth Self-Report syndrome structure in 23 societies. *Journal of Consulting and Clinical Psychology*, 75(5), 729-738. doi: 10.1037/0022-006x.75.5.729.
- Karevold, E. (2008). Emotional problems in childhood and adolescence: Predictors, pathways and underlying structure: Division problems in preadolescence. *Development and Psychopathology*, 16, 421–440.
- Kelty Mental Health Resource Centre. (2012). Behaviour problems in children and adolescents. *Fact Sheet: Behaviour problems in children and adolescents*. Retrieved from [http://keltymentalhealth.ca/sites/default/files/Kelty\\_behaviour\\_ENG\\_web.pdf](http://keltymentalhealth.ca/sites/default/files/Kelty_behaviour_ENG_web.pdf)
- Kenny, M., & Egan, J. (2011). Somatization disorder: What clinicians need to know? *The Irish Psychologists*, 37(4), 93-96.

- Khouzam, H., & Field, S. (1999). Somatization disorder: Clinical presentation and treatment in primary care. Practice strategies. *Hospital Physician*, 45, 20-24.
- Kleintjes, S., Lund, C., & Flisher, A. (2010). A situational analysis of child and adolescent mental health services in Ghana, Uganda, South Africa and Zambia. *African Journal of Psychiatry*, 13, 132-139.
- Korhonen, M., Luoma, I., Salmelin, R., Helminen, M., Kaltiala-Heino, R., & Tamminen, T. (2014). The trajectories of child's internalising and externalising problems, social competence and adolescent self-reported problems in a Finnish normal population sample. *School Psychology International*, 35(6), 561–579. [sagepub.co.uk/journalsPermissions.nav](http://sagepub.co.uk/journalsPermissions.nav). DOI: 10.1177/0143034314525511.
- Korir, D. & Kipkemboi, F. (2014). Impact of School Environment and Peer Influences on Students' Academic Performance in Vihiga County, Kenya. *International Journal of Humanities and Social Science*, 4, 5(1), 1-12. Retrieved from [www.ijhssnet.com](http://www.ijhssnet.com).
- Kothari, C. (2004). *Research methodology: Methods and techniques* (2nd ed.). New Delhi: New Age International Publication.
- Kumar, R. (2011). *Research methodology: A step-by-step guide for beginners* (3rd ed.) Los Angeles: Sage.
- Lahey, B. (2004). *Psychology: An introduction*. (8th ed.). New York: McGraw-Hill.
- Laukkanen, E., Shemeikka, S., Notkola, I., Koivumaa-Honkgnen, H., & Nissine, A. (2002). Externalising and internalising problems at school as signs of health-damaging behaviours and incipient marginalisation. *Health Promotion International*, 17(2), 139-146.

- Lawrence, A., & Vimala, A. (2012). School environment and academic achievement of standard ix students. *Journal of Educational and Instructional Studies in the World*, 2(23), 209-215. Retrieved from <https://files.eric.ed.gov/fulltext/ED542331.pdf>.
- Li, H., & Armstrong, D. (2009). Is there a correlation between academic achievement and behavior in Mainland Chinese students? *Asian Social Science*, 5(4), 3-9. Retrieved from <http://www.ccnnet.org/journal.html>.
- Lv, M., Wan, Y., & Fu, H. (2015). Influence of internalising problems on academic achievement in Chinese adolescents: The mediating effect of attention problems. *Psychologia*, 58, 75- 83.
- Manitoba Education Research Network (MERN). (2011). Applications and utility of Urie Bronfenbrenner's Bio-ecological Theory. In B. Lewthwaite, (Ed.). *Monograph Series, Issue 4*. University of Manitoba Centre for Research in Youth, Science Teaching and Learning.
- Martin, W. & Bridgmon, K. (2012). *Quantitative and statistical research methods: From hypothesis to results*. San Fransisco: Jossey-Bass.
- Mason, W., January, S., Fleming, C., Thompson, R., Parra, G., Haggerty, K., & Snyder, J. (2016). Parent training to reduce problem behaviors over the transition to high school: Tests of indirect effects through improved emotion regulation skills. *Child Youth Serv Rev.*, 1(61): 176–183. doi:10.1016/j.chilyouth.2015.12.022.
- Matsumoto, D. (2007). Culture, context, and behavior. *Journal of Personality*, 75(6), 1285- 1320. DOI: 10.1111/j.1467-6494.2007.00476.x.



Mbwayo, A., & Mathai, M. (2016). Association between hopelessness and conduct problems among school going adolescents in a rural and urban setting in Kenya. *Journal of Child & Adolescent Behavior*, 4(3), 1-4. doi:10.4172/2375-4494.1000291.

McEntarffer, R., & Weseley, A. (2012). *Barron's AP psychology* (5th ed.). New York: Barron's Educational Series.

McLeod, J., Uemura, R., & Rohrman, S. (2012). Adolescent mental health, behavior problems and academic achievement. *Journal of Health and Social Behavior*, 53(4), 482-497. DOI: 10.1177/0022146512462888, Retrieved from <http://jhsb.sagepub.com>.

McNeely, C., & Blanchard, J. (2009). *The teens' years explained: A guide to healthy adolescent development*. Center for Adolescent Health at Johns Hopkins Bloomberg School of Public Health. Johns Hopkins University. Retrieved from [www.jhsph.edu/adolescenthealth](http://www.jhsph.edu/adolescenthealth).

McQueen, R., & Kunssen, C. (2013). *Introduction to research methods and statistics in psychology: A practical guide for undergraduate researchers* (2nd ed.). New York: Pearson.

McWhinney, B. (1986). Common problems of adolescents encountered in schools. *Can. Fam. Physician*, 32: 2395-2399.

Melchert, T. (2015) *Biopsychosocial practice: A science-based framework for behavioral health care*. Washington DC: American Psychological Association. DOI: 10.1037/14441-008.

Merrilees, C., Taylor L., Goeke-Morey, M., Shirlow, P., & Cummings, E. (2014). The protective role of group identity: Sectarian antisocial behavior and adolescent emotion problems. *Child Development*, 85(2), 412–420. Inc. DOI: 10.1111/cdev.12125.

- Miller, P. (2011). *Theories of developmental psychology* (5th ed.). New York: Worth Publisher.
- Mingers, J. (2001). Combining IS research methods: Towards a pluralist methodology. *Information Systems Research (INFORMS)*, 12(3), 240–259.
- MOE. (2008). *National technical and vocational education and training strategy: Engineering capacity building program* (2nd ed.). Addis Ababa, Ethiopia: Ministry of Education.
- Mohapatra, S., Deo, S. Stapathy, A. & Rath, N. (2014). Somatoform disorders in children and adolescents. *Review articles, Reprinted from the German Journal of Psychiatry*. Retrieved from <http://www.gipsy.uni-goettingen.de>
- Muijs, D. (2004). *Doing quantitative research in education*. London: Sage.
- Mumthas, N., & Muhsina, M. (2014) Psycho-Social Problems of Adolescents at Higher Secondary Level. *Guru Journal of Behavioral and Social Sciences*, 2(1), 252-257.
- National Institute of Mental Health (NIMH) (2012). *Attention deficit hyperactivity disorder (ADHD)*. U.S. Department of Health and Human Services. Retrieved from <https://infocenter.nimh.nih.gov/pubstatic/NIH%2012-3572/NIH%2012-3572.pdf>
- Neal, J., & Neal, Z. (2013). Nested or networked? Future directions for ecological systems theory. *Social Development*, 22(4), 722–737.doi: 10.1111/sode.12018
- Neto, L. (2005). Bullying - aggressive behavior among students. *Jornal de Pediatria*, 81(5): s164-s172.

NIH. (2012). Attention deficit hyperactivity disorder (ADHD). U.S. Department of Health and Human Services. *National Institute of Health*. Retrieved from <http://www.nimh.nih.gov>

Nino, M., Ignatow, G., & Cai, T. (2017). Social isolation, strain, and youth violence. *Youth Violence and Juvenile Justice*, 15(3), 299-313. DOI: 10.1177/1541204016636435.

Odeh, R., Oguiche, O. Angelina, I., & Dondo, E. (2015). Influence of school environment on academic achievement of students in secondary schools in zone "A" senatorial district of Benue State, Nigeria. *International Journal of Recent Scientific Research*, 6(7), 4914-4922. Retrieved from [www.recentscientific.com](http://www.recentscientific.com)

OpenStax College (2013). Introduction to Sociology. Rice University. Retrieved from <http://openstaxcollege.org>.

PACER Center (2006). *What is an emotional or behavioral disorder? Action Information Sheets*. Retrieved from <https://www.nathanielshope.org/images/Docs/ResourceWhat%20is%20an%20Emotional%20or%20Behavioral%20Disorder.pdf>

PACER Center. (2006). *What is an emotional or behavioral disorder? Action information Sheet*. Retrieved from <https://www.nathanielshope.org/images/Docs/ResourceWhat%20is%20an%20Emotional%20or%20Behavioral%20Disorder.pdf>

Pallant, J. (2010). *SPSS survival manual: A step by step guide to data analysis using SPSS (4th ed.)*. New York: McGraw-Hill.

Pandey, P., & Pandey, M. (2015). *Research methodology: Tools and techniques*. Buzau: Bridge Center.

Paplia, D., Feldman, R. & Olds, S. (2004). *Human development* (9th ed.). New Delhi: McGraw

Pastor, N., Reuben, A., & Duran, R. (2014). Identifying emotional and behavioral problems in children aged 4–17 years. *National Health Statistic Report, Office of Analysis and Epidemiology*: U.S. Department of Health and Human Services. Centers for Disease Control and Prevention, National Center for Health Statistics, United States, 2001–2007. 2012–1250. Retrived from [https://www.researchgate.net/publication/228080306\\_Identifying\\_Emotional\\_and\\_Behavioral\\_Problems\\_in\\_Children\\_Aged\\_4-17\\_Years\\_United\\_States\\_2001-2007](https://www.researchgate.net/publication/228080306_Identifying_Emotional_and_Behavioral_Problems_in_Children_Aged_4-17_Years_United_States_2001-2007)

Pathak, R. (2011). *Research in education and psychology*. New Delhi: Pearson Education; Dorling Kindersley.

Pathak, R., Sharma, R., Parvan, U., Gupta, B., Ojha, R., & Goel, N. (2011). Behavioural and emotional problems in school going adolescents. *Australasian Medical Journal*, 4(1), 15-21. Doi: <http://dx.doi.org/10.4066/AMJ.2011.464>

Pennsylvania Child Welfare Training Program. (2005). *Child and adolescent development resource book*. Pennsylvania: The University of Pittsburgh.

Petot, D., Petot, J-M., & Achenbach, T. (2008). Behavioral and emotional problems of Algerian children and adolescents as reported by parents. *European Child & Adolescent Psychiatry*, 17(4), 200-208. DOI 10.1007/s00787-007-0654-8

Piaget, J. (1929). *The child's perception of the world*. Translated by A. Tomlinson. Trowbridge: Redwood press.

Plenty, S., Östberg, V., Almquist, B., Augustine, L., & Modin, B. (2014). Psychosocial working conditions: An analysis of emotional symptoms and conduct problems amongst adolescent students. *Journal of Adolescence*, 37, 407-417. Retrieved from <http://www.elsevier.com/locate/jado>

Plotnik, R. & Kouyoumadjian, H.(2011).*Introduction to psychology* (9<sup>th</sup> ed.). Belmont: Wadsworth

Plüddemann, A., Morojele, N., Myers, B., Townsend, L., Lombard, C., Williams, P., Carney, T., & Nel, E. (2014). The prevalence of risk for mental health problems among high school students in the Western Cape Province, South Africa. *South African Journal of Psychology*, 44(1), 30-35. DOI: 10.1177/0081246313516264.

Powers, A., & Casey, B. (2015). The adolescent brain and the emergence and peak of psychopathology. *Journal of Infant, Child, and Adolescent Psychotherapy*, 14, 3–15. DOI: 10.1080/15289168.2015.1004889

Reijneveld, S., Wieggersma, A., Ormel, J., Verhulst, F., Vollebergh, W., & Jansen, D. (2014). Adolescents' use of care for behavioral and emotional problems: Types, trends, and determinants. *PLoS ONE*, 9(4), 1-12.

Rescorla, L., Achenbach, T., Ivanova, M., Dumenci, L., Almqvist, F., Bilenberg, N ... Verhulst, F. (2007). Behavioral and emotional problems reported by parents of children ages 6 to 16 in 31 societies. *Journal of Emotional and Behavioural Disorders*, 15(3), 130-142.

Rescorla, L., Achenbach, T., Ivanova, M., Dumenci, L., Almqvist, F., Bilenberg, N... Verhulst, F. (2007). Epidemiological comparisons of problems and positive qualities reported by adolescents in 24 countries. *Journal of Consulting and Clinical Psychology*, 75(2), 351-358.

Riccucci, N. (2008). In Yang, K., & Miller, G. (Eds.). *Handbook of research methods in public administration* (2nd ed.). New York: Taylor & Francis.

Richard, G. (2005). *The science of mind and behaviour* (5th ed.). Douai, Fr.: Hodder Arnold

- Risper, W. (2012). Late childhood and adolescent externalising and internalising psychopathology in rural public secondary and primary schools in western Kenya. *Journal of Emerging Trends in Educational Research and Policy Studies (JETERAPS)*, 3(6), 933-940.
- Rodgers, A., & Dunsmuir, S. (2015). A controlled evaluation of the 'FRIENDS for Life' emotional resiliency programme on overall anxiety levels, anxiety subtype levels and school adjustment. *Child and Adolescent Mental Health*, 20(1), 13–19. doi:10.1111/camh.12030.
- Rosa, E., & Tudge, J. (2013). Urie Bronfenbrenner's Theory of Human Development: Its evolution from ecology to bioecology. *Journal of Family Theory & Review*, 5, 243–258. DOI:10.1111/jftr.12022.
- Rubin, K., Bowker, J., & Gazelle, H. (2010). Social withdrawal in childhood and adolescence: Peer relationships and social competence. In K. Rubin & R. Coplan(Eds). *The Development of Shyness and Social Withdrawal*, (131-156). Guilford. Retrieved from <http://www.guilford.com>.
- Rubin, K., Coplan, R., & Bowker, J. (2009). Social withdrawal in childhood. *Annu Rev Psychol*, 60, 141–171. doi:10.1146/annurev.psych.60.110707.163642.
- Rubin, W., Bowker, J., Booth-LaForce, C., Rose-Krasnor, L. & Laursen, B. (2007). Trajectories of social withdrawal from middle childhood to early adolescence. *J Abnorm Child Psychol*, 1-14. DOI 10.1007/s10802-007-9199-z
- Ruffi, N. (2009). Adolescent growth and development. Virginia Cooperative Extension. Publication, 350-850. Virginia Polytechnic Institute and Virginia State University. Retrieved from <http://www.ext.vt.edu>.
- Rush, B., Castel, S., & Desmond, R. (2009). *Screening for concurrent substance use and mental health problems in youth*. Toronto: Centre for Addiction and Mental Health.

- Saleem, S., & Mahmood, Z. (2013). Risk and protective factors of emotional and behavioral problems in school children: A prevalence study. *Pakistan Journal of Psychological Research*, 28 (2), 239-260.
- Sales, J., & Irwin, C. (2013). A biopsychosocial perspective of adolescent health and disease. In W. O'Donohue, L. Banuto & L. Woodward (Eds.), *Handbook of adolescent health psychology*. New York: Springer.
- Saluja, G., Iachan, R., Scheidt, P., Overpeck, M., Sun, W., & Giedd, J. (2004). Prevalence of and risk factors for depressive symptoms among young adolescents. *Arch Pediatr Adolesc Med*, 158:760-765.
- Sanders, R. (2013). Adolescent psychosocial, social, and cognitive development. *Pediatrics in Review*, 34 (8), 354- 361. DOI: 10.1542/pir.34-8-354. Retrieved from <http://pedsinreview.aappublications.org>.
- Santrock, J. (2006). *Life-span development* (10th ed.). New York: McGraw-Hill.
- Seifert, K. & Sutton, R. (2009). *Educational psychology* (2nd ed.). Retrived from <https://www.saylor.org/site/wp-content/uploads/2012/06/Educational-Psychology.pdf>
- Servili, C. (2012). Organising and delivering services for child and adolescent mental health. In J., Rey (Ed.). *IACAPAP e-Textbook of Child and Adolescent Mental Health*. Geneva: International Association for Child and Adolescent Psychiatry and Allied Professions.
- Shaffer, D., & Kipp, K. (2010). *Developmental psychology: Childhood and adolescence* (8th ed.). Belmont: Wadsworth.
- Sharf, R. (2012). *Theories of psychotherapy and counseling: Concepts and cases* (5th ed.). Belmont: Cengage Learning.

- Shirtcliff, A., Dahl, R., & Pollak, S. (2009). Pubertal development: Correspondence between hormonal and physical development. *Child Development, 80*(2), 327–337.
- Sijtsema, J., Oldehinkel, A., Veenstra, R., Verhulst, F., & Ormel, J. (2014). Effects of structural and dynamic family characteristics on the development of depressive and aggressive problems during adolescence. The TRAILS study. *Eur Child Adolesc Psychiatry, 23*, 499–513. DOI 10.1007/s00787-013-0474-y.
- Simuforosa, M. (2013). Stress and adolescent development. *Greener Journal of Educational Research, 3*(8), 373-380. Retrieved from [www.gjournals.org](http://www.gjournals.org).
- Singh, Y. (2006). *Fundamentals of research methodology and statistics*. New Delhi: New Age International.
- Spano, S. (2004). ACT for upstate center of excellence. *Research Acts and Findings*. Cornell University. Retrieved from [http://www.actforyouth.net/resources/rf/rf\\_delinquency\\_0902.pdf](http://www.actforyouth.net/resources/rf/rf_delinquency_0902.pdf)
- Spear, L. (2010). *The biology of adolescence*. Binghamton University.
- Steele, M., Bate, J., Nikitiades, A., & Buhl-Nielsen, B. (2015). Attachment in adolescence and borderline personality disorder. *Journal of Infant, Child, and Adolescent Psychotherapy, 14*, 16–32. DOI: 10.1080/15289168.2015.1004882
- Steinberg, L. (2001). Adolescent development. *Annual Review Psychology, 52*, 83-110.



- Suarez-Balcazar, Y., Balcazar, F., Garcia-Ramirez, M., & Taylor-Ritzler, T. (2014). Ecological theory and research in multicultural psychology. In F. Leong, (Ed.). *APA handbook of multicultural psychology, theory and research*. <http://dx.doi.org/10.1037/14189-029>.
- Suwa, M. & Suzuki, K. (2013). The phenomenon of “hikikomori” (social withdrawal) and the socio-cultural situation in Japan today. *Journal of Psychopathology*, 19, 191-198
- Swearer, S., & Hymel, S. (2015). Understanding the psychology of bullying. Moving toward a social-ecological diathesis–stress model. *American Psychological Association*, 70(4), 344–353. Retrieved from <http://dx.doi.org/10.1037/a0038929>.
- Symeou, M., & Georgiou, S. (2017). Externalising and internalising behaviours in adolescence, and the importance of parental behavioural and psychological control practices. *Journal of Adolescence*, 60, 104-113. Retrieved from <http://dx.doi.org/10.1016/j.adolescence.2017.07.007>.
- Taylor, R., Jacobson, L., & Roberts D. (2000). Ecological Correlates of the Social and Emotional Adjustment of African American Adolescents. In R. Montemayor, G. Adams, & T. Gullotta (Eds.) *Adolescent Diversity in Ethnic, Economic, and Cultural Contexts*. Oaks: SAGE Publications, Inc. DOI: <http://dx.doi.org/10.4135/9781452225647.n8>
- Terzian, M., Hamilton, Katie, H., & Ericson, S. (2011). *Child trend: Fact sheet*. *American Journal of Psychiatry*, 166, 337–344.
- Thorndike, R. (2008). T- Scores. In N. Salkind. (Ed.) *Encyclopedia of Educational Psychology*, 2, 961–962. Los Angeles. SAGE Publications
- Tillotson, M. (2008). Attention Deficit Hyperactivity Disorder. In N. Salkind. (Ed.) *Encyclopedia of educational psychology*, 1, 79-81. Los Angeles: SAGE Publications

Tiwari, P., & Ruhela, S. (2012). Social isolation & depression among adolescents: A comparative perspective. 2nd International Conference on Social Science and Humanity IPEDR, 31. Singapore: IACSIT Press.

UNICEF Ethiopia (2016). Ethiopia country profile: Briefing Note. Retrieved from [www.unicef.org/ethiopia](http://www.unicef.org/ethiopia)

United Nations, Department of Economic and Social Affairs, Population Division. *World Population Prospects: 2017 Revision*. Retrieved from <http://www.worldometers.info/world-population/ethiopia-population/>

Vanderstoep, S., & Johnston, D. (2009). *Research methods for everyday life: Blending qualitative and quantitative approaches*. San Francisco: Jossey-Bass.

Vaquera, E., & Kao, G. (2008). Do you like me as much as I like you? Friendship reciprocity and its effects on school outcomes among adolescents. *Soc Sci Res.*, 37(1), 55–72. doi:10.1016/j.ssresearch.2006.11.002.

Veldman, K., Itmann, U., Stewart, R., Ormel, J., Verhulst, F., & Reijneveld, S. (2014). Mental health problems and educational attainment in adolescence: 9-Year follow-up of the TRAILS Study, 9(7), 1-7. Retrieved from [www.plosone.org](http://www.plosone.org)

Viner, R. (2012). Our Children Deserve Better: Prevention Pays Life stage: Adolescence. Annual Report of the Chief Medical Officer. Retrieved from [https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\\_data/file/252658/33571\\_2901304\\_CMO\\_Chapter\\_8.pdf](https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/252658/33571_2901304_CMO_Chapter_8.pdf)

Vlasova, J., & Grigutyte, G. (2013). Girls' emotional and behavioral problems in early adolescence: Differences between pubertal timing and perceived pubertal timing. *Baltic Journal of Psychology*, 14 (1, 2), 106–116.

Vulić-Prtorić, A. (2016). Somatic complaints in adolescence: Prevalence patterns across gender and age. *Psychological Topics*, 25 (1), 75-105.

- Waddell, C., Wong, W., Hua, J., & Godderis, R. (2004). Preventing and treating conduct disorder in children and youth. *A Research Report Prepared for the British Columbia Ministry of Children and Family Development*, 1(3),1-32. Retrieved from [www.childmentalhealth.ubc.ca](http://www.childmentalhealth.ubc.ca)
- Walker, R., Robinson, M., Adermann, J., & Campbell, M.(2014) *Working with behavioural and emotional problems in young people*. In Dudgeon, Pat, Milroy, Helen, & Walker, Roz (Eds.) *Working together: aboriginal and torres strait islander mental and health and wellbeing principles and practice* (2nd Ed). pp. 383-397. Barton :Commonwealth of Australia.
- Wang, J., Liu, L., Wu, H., Yang, X., Wang, Y., & Wang, L. (2014). Agreement between parents and adolescents on emotional and behavioral problems and its associated factors among Chinese school adolescents: A cross-sectional study. *BMC Psychiatry*, 14(114), 1-14. Doi: 10.1186/1471-244X-14-114 (<http://creativecommons.org/licenses/by/2.0>).
- Wang, J-N., Liu, L., & Wang, L. (2013). Prevalence and associated factors of emotional and behavioural problems in Chinese school adolescents: A cross-sectional survey. *Child: Care, Health and Development*, 40(3), 319–326.
- Waters, S., Cross, D., & Runions, K. (2009). Social and ecological structures supporting adolescent connectedness to school: A theoretical model. *Journal of School Health*, 79(11), 516-524. American School Health Association. <https://doi.org/10.1111/j.1746-1561.2009.00443.x>
- WHO (2005). *Atlas child and adolescent mental health resources: Global concerns, implications for the future*. Geneva: WHO Press

- WHO (2017). Mental health status of adolescents in South-East Asia. *Evidence for Action*. New Delhi: Regional Office for South-East Asia. Licence: CC BY-NC-SA 3.0 IGO. Retrieved from <http://apps.who.int/iris/bitstream/handle/10665/254982/9789290225737-eng.pdf?sequence=1>
- Willcutt, E. (2012). The prevalence of DSM-IV attention-deficit/hyperactivity disorder: a meta-analytic review. *The American Society for Experimental Neuro Therapeutics*, 9, 490–499. DOI 10.1007/s13311-012-0135-8.
- Wilmshurst, L. (2013). *Clinical and educational child psychology: An ecological-transactional approach to understanding child problems and interventions*. Hoboken: John Wiley & Sons, Ltd.
- Xia, M., Fosco, G., & Feinberg, M. (2015). Examining reciprocal influences among family climate, school attachment, and academic self-regulation: Implications for school success. *Journal of Family Psychology*. Advance online publication. <http://dx.doi.org/10.1037/fam0000141>
- Zach, S., Yazdi-Ugav, O., & Zeev, A. (2016). Academic achievements, behavioral problems, and loneliness as predictors of social skills among students with and without learning disorders. *School Psychology International*, 37(4), 378–396. [sagepub.co.uk/journalsPermissions.nav](http://sagepub.co.uk/journalsPermissions.nav). DOI: 10.1177/0143034316649231 [spi.sagepub.com](http://spi.sagepub.com)
- Zahn-Waxler, C., Klimes-Dougan, B., & Slattery, M. (2000). Internalising problems of childhood and adolescence: Prospects, pitfalls, and progress in understanding the development of anxiety and depression. *Development and Psychopathology*, 12, 443–466.
- Zahrt, D., & Melzer-Lange, M. (2011). Aggressive behavior in children and adolescents. *Pediatrics in Review, American Academy of Pediatrics*, 32(8), 325-334. Retrieved from <http://pedsinreview.aappublications.org>.

## APPENDIX A: Letter of Permission to Translate and to Use ASEBA YSR 2001



The University of Vermont

### ASEBA

**Research Center for Children, Youth & Families, Inc./ASEBA,  
A Non-Profit Corporation**  
1 South Prospect Street, St Joseph's Wing (Room #3207), Burlington, VT 05401  
Telephone: (802)656-5130 / Fax: (802)656-5131  
Email: [mail@aseba.org](mailto:mail@aseba.org) / Website: <http://www.aseba.org>

### **License Agreement to Permit Dereje Adefris Woldetsadik to Translate the Youth Self-Report (YSR) into Oromic and to Update the Amharic Translation to the 2001 Version**

This License Agreement (the "Agreement") is entered into by and between Research Center for Children, Youth & Families, Inc. ("Licensor"), and Dereje Adefris Woldetsadik ("Licensee"). Licensee must sign and return the signed Agreement to Licensor. The Agreement shall be effective on the date ("Effective Date") when signed by Licensor. The parties agree to the following terms and conditions:

#### **1. License # 1277-01-07-16**

In accordance with the terms herein, Licensor grants to Licensee a non-exclusive and non-transferable license to translate the YSR into Oromic and update the Amharic translation of the YSR to the 2001 version (the "Translation(s)") and to use the Translation(s) in research and clinical work by Dereje Adefris Woldetsadik. License rights begin on the "Effective Date" and end on June 25, 2016.

#### **2. Licensee Obligations**

Licensee acknowledges that in addition to its other obligations under this Agreement, Dr. P. van der Merwe shall serve as Licensed Site Manager who shall be responsible, directly or by designee, for:

- (a) Ensuring that the format of the Translation(s) is modeled directly on the English version, including placing items in the same sequence and using the same item numbers and letters as on the English version. (Note: Items such as 56 and the open-ended item 113 of the CBCL/6-18 and TRF must have the 0-1-2 ratings below the number rather than next to the number.)
- (b) Ensuring the accuracy of the Translation(s) via back translation and pilot testing with informants for whom the Translation(s) is designed.
- (c) Ensuring use of the Licensed Translation(s) only in accordance with professional psychological assessment standards.
- (d) Ensuring that Page 1 of all copies of the Licensed Translation(s) bear the copyright notice printed on Page 1 of the translated English-language ASEBA Form(s), followed by:

Reproduced under License # 1277-01-07-16

- (e) Upon completion of the Translation(s), sending a paper copy and electronic file of the Translation(s), plus an electronic file of the back translation into English to T.M. Achenbach. The License is not valid until you receive approval of the Translation(s) from ASEBA.
- (f) Upon completion of reports of use of the Translation(s), sending a copy of the reports to T.M. Achenbach.

Site Manager's address is: University of South Africa (UNISA), Theo Van Wijk Building 5-41, Pretoria, South Africa; e-mail: [vdmerp1@mylife.unisa.ac.za](mailto:vdmerp1@mylife.unisa.ac.za); tel: + 27 012 429 2118; fax: 086 247 5922.

3/25/2016

### 3. Title to Licensed Translation(s) and Confidentiality

The Translation(s), and all copies thereof, are proprietary to Licensor and title thereto remains in Licensor. All applicable rights to patents, copyrights, trademarks and trade secrets in the Translation(s) or any modifications thereto made at Licensee's request, are and shall remain in Licensor. Licensee hereby assigns to Licensor all rights, title and interest, including copyrights, that Licensee holds in the Translation(s). Licensee shall not sell, transfer, publish, disclose, display or otherwise make available the Licensed Translation(s), or copies thereof, to anyone other than employees, consultants and contractors of Licensee and to people completing the Licensed Translation(s). Licensee shall not use the Licensed Translation(s) as a reference to develop competing materials.

Licensee agrees to secure and protect the Licensed Translation(s), and copies thereof, in a manner that ensures they are used only in accordance with the rights licensed herein. Licensee also agrees to take appropriate action by instruction or agreement with its employees, consultants and contractors who are permitted access to the Licensed Translation(s) to ensure use only in accordance with the rights licensed herein.

Licensee additionally agrees that the official ASEBA name(s) or translations of the official ASEBA name(s) will be retained in all references to the Licensed Translation(s). For example, the Child Behavior Checklist for Ages 6-18 must be referred to by this name or its acronym CBCL/6-18.

### 4. Use and Training

Licensee shall limit the use of the Licensed Translation(s) to its employees who have been appropriately trained.

### 5. Warranty

- (a) Licensor warrants that the English-language ASEBA Form(s) to be translated will conform, as to all substantial features, to the documentation provided in the 2001 Manual for the ASEBA School-Age Forms & Profiles.
- (b) The Licensee must notify Licensor in writing, within ninety (90) days of the effective date of this Agreement, of its claim of any defect. If the Licensor finds the Form(s) to be defective, Licensor's sole obligation under this warranty is to remedy such defect in a manner consistent with Licensor's regular business practices.
- (c) THE ABOVE IS A LIMITED WARRANTY AND IT IS THE ONLY WARRANTY MADE BY LICENSOR. LICENSOR MAKES AND LICENSEE RECEIVES NO OTHER WARRANTY EXPRESS OR IMPLIED AND THERE ARE EXPRESSLY EXCLUDED ALL WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE. LICENSOR SHALL HAVE NO LIABILITY WITH RESPECT TO ITS OBLIGATIONS UNDER THIS AGREEMENT FOR CONSEQUENTIAL, EXEMPLARY, OR INCIDENTAL DAMAGES EVEN IF IT HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES. THE STATED EXPRESS WARRANTY IS IN LIEU OF ALL LIABILITIES OR OBLIGATIONS OF LICENSOR FOR DAMAGES ARISING OUT OF OR IN CONNECTION WITH THE DELIVERY, USE, OR PERFORMANCE OF THE ENGLISH-LANGUAGE ASEBA FORM(S).
- (d) Licensee agrees that Licensor's liability arising out of contract, negligence, strict liability in tort or warranty shall not exceed any amounts payable to Center by Licensee for the Licensed material identified above.

### 6. Termination

Licensor shall have the right to terminate this agreement and license granted herein:

- (a) Upon thirty (30) days' written notice in the event that Licensee, its officers or employees, violate any material provision of this License Agreement, including but not limited to, the confidentiality provisions and use restrictions in the license grant, and is unable to cure such breach during such thirty (30) day period; or



- (b) In the event Licensee (i) terminates or suspends its business; (ii) becomes subject to any bankruptcy or insolvency proceeding under Federal or state statute or (iii) becomes insolvent or becomes subject to direct control by a trustee, receiver or similar authority.

In the event of termination by reason of the Licensee's failure to comply with any part of this Agreement, or upon any act which shall give rise to Licensor's right to terminate, Licensor shall have the right to take immediate possession of the ASEBA Form(s) and Translation(s) and all copies wherever located, without demand or notice. Within five (5) days after termination of the License, Licensee will return to Licensor the ASEBA Form(s) and Translation(s), and all copies. Termination under this paragraph shall not relieve Licensee of its obligations regarding confidentiality of the ASEBA Form(s) and Translation(s). Termination of the license shall be in addition to and not in lieu of any equitable remedies available to Licensor.

**7. General**

- (a) Each party acknowledges that it has read this Agreement, it understands it, and agrees to be bound by its terms, and further agrees that this is the complete and exclusive statement of the Agreement between the parties, which supersedes and merges all prior proposals, understandings and all other agreements, oral and written, between the parties relating to this Agreement. This Agreement may not be modified or altered except by written instrument duly executed by both parties.
- (b) Dates or times by which Licensor is required to make performance under this Agreement shall be postponed automatically to the extent that Licensor is prevented from meeting by causes beyond its reasonable control.
- (c) This Agreement and performance hereunder shall be governed by the laws of the State of Vermont.
- (d) No action, regardless of form, arising out of this Agreement may be brought by Licensee more than two years after the cause of action has arisen.
- (e) If any provision of this Agreement is invalid under any applicable statute or rule of law, it is to the extent to be deemed omitted.
- (f) The Licensee may not assign or sub-license, without the prior written consent of Licensor, its rights, duties or obligations under this Agreement to any person or entity, in whole or in part.
- (g) Licensor shall have the right to collect from Licensee its reasonable expenses incurred in enforcing this Agreement, including attorney's fees.
- (h) The waiver or failure of Licensor to exercise in any respect any right provided for herein shall not be deemed a waiver of any further right hereunder.

Accepted and Agreed to:

LICENSOR:

Thomas M. Achenbach, Ph.D.

Signature:

Title: President, Research Center for

Children, Youth & Families, Inc.

Date:

8 January 2016

For License 1277-01-07-16

Accepted and Agreed to:

LICENSEE:

Dereje Adefris Woldetsadik

Signature: 

Print name: Dereje Adefris Woldetsadik

Title: Mr.

Address: P.O.Box 2990, Adama Nazareth-Ethiopia. Email, ginbot21@gmail.com

Date: 8/1/2016

## APPENDIX B: Ethical Clearance



### Ethical Clearance for M/D students: Research on human participants

*The Ethics Committee of the Department of Psychology at Unisa have evaluated this research proposal for a Higher Degree in Psychology in light of appropriate ethical requirements, with special reference to the requirements of the Code of Conduct for Psychologists of the HPCSA.*

**Student Name:** D.A. Woldetsadik **Student no.** 55780032

**Supervisor/promoter:** Dr P. van der Merwe **Affiliation:** Department of Psychology, Unisa

**Title of project:**

**PREVALENCE OF EMOTIONAL AND BEHAVIOURAL PROBLEMS OF ADOLESCENTS: PITFALLS AND PRACTICES OF SECONDARY SCHOOLS IN ETHIOPIA.**

The application was approved by the departmental Ethics Committee on the understanding that

–

- Permission be obtained from the Zone and Woreda educational offices, school administrators and teachers of the schools involved, to conduct the research, and written permission from all the parents/guardians of the children participating in the study;
- All ethical requirements regarding informed consent, the right to withdraw from the study, the protection of participants' privacy and the confidentiality of the information will be met to the satisfaction of the supervisor.

*Signed:*

A handwritten signature in black ink that reads 'H C Janeke'. The signature is written in a cursive style.

Date: 27 October 2015

**Prof H C Janeke**

[For the Ethics Committee]

[Department of Psychology, Unisa]



**APPENDIX C: Adama Science and Technology University cooperation letter to East Showa Educational Office and Adama City Educational Office**



አዳማ ሳይንስ እና ቴክኖሎጂ ዩኒቨርሲቲ  
Adama Science & Technology University

☎: 1888 Fon: +251-221-110400 Fax: +251-221-100057 Email: SoP@adama-university.net

Date: 04/02/2016  
Refer. No. PsyD/006/005/2016

To: East Showa Educational Office  
Adama City Educational office

College of Education & Behavioural sciences  
Birhanu Mogess (PhD)  
Head, Department of psychology

**Subject: Requesting for Cooperation**

Mr. Dereje Adefris Woldetsadik is one of psychology department staff member of Adama Science and Technology University and PhD candidate at UNISA. His PhD research project is focus on secondary school adolescents' behaviour of East Showa Administrative Zone. By now he is about to collect data from selected secondary school of East Showa Administrative Zone. Accordingly, your good office permission and support is strongly required to collect the necessary data from the sample schools. The sample schools are Goro, Wonji, Adami Tulu, Batu, Boset, Oda Bokota, Mojo, and Awash Melkassa Secondary Schools. Besides, UNISA higher degree Ethics committee needs to get permission letter from each concerned offices to collect data, one of which is your office.

Therefore, I request your good office to cooperate him in facilitating the necessary conditions.

Thank you in advance for your cooperation.

With regards

ብርሃኑ ሞገስ ዓለሙ  
የሳይንስና ቴክኖሎጂ ድ.ፊ.ሲ.አ. ስራ ሰሪ  
Birhanu Moges Alemu  
Head, Department of psychology



Cc.

Dereje Adefris Woldetsadik

**APPENDIX D: East Shoa Educational Office letter of cooperation and consent to sample schools to conduct the study**



**APPENDIX E: Batu Secondary School letter of cooperation and consent**



Hiiso Barnoota Oromiyaatti Mana Barnoota Hattuu Sad 2<sup>nd</sup> Oromia Educational Bureau Batu Secondary School



Waxjira Barnoota Godina Sh/Bahaatti Mana  
Barnoota Sadarkaa 2<sup>nd</sup> Baatu

የምስራቅ ምን ት/ት ጸ/ዲ/ት ተ/ቤት 2ኛ  
ደ/ት ት/ቤት

East Shoa Zone Education Office  
Batu Secondary School

Ref. No BSS/445/34

Date 18/05/2016

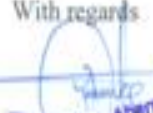
To: Mr. Dereje Adefris Woldetsadik

Subject: Permission to collect data for your research project from our school

East Shoa Zone Education Office has informed our school to cooperate and allow you in gathering data from students of our school with a written letter dated on 20/04/2016, ref no. WBGSH 9/809/22/08 referring the cooperation request of Adama Science and Technology University.

Therefore, I confirm that the school has allowed you to collect data for your research project from the students as well to get support from the school community.

With regards

  
Dammaaqa Aberra  
ደ.ገ. ለበ  
Demeke Aberra  
Dura Taa'aa  
ገዢ ማኅበር  
Principal



## APPENDIX F: Wonji Secondary School consent letter

  
አዳዲስ ትምህርት ግብይት  
ወንጋ ስኬት ስኬት ስኬት  
ወንጋ ስኬት ስኬት ስኬት  
ወንጋ ስኬት ስኬት ስኬት

Ref. No 7/00/d/1/11

Date 02/10/2008

**To: Mr. Dereje Adefris Woldetsadik**

**Subject: Informing the readiness of our school to gather data for your research**

It is recalled that you have requested East Showa Educational Office for permission to collect data from our school (Wonji secondary school). In this regard the zone Educational Office has informed our school to cooperate and permit you to collecting data for your research project from our students with a written letter dated on 20/04/2016, ref. no. WBGSH 9/809/22/08.

Therefore, this is to inform you that the school has acknowledged your request to collect data for your research project from our students. Of course, you will get also cooperation from the school communities who have direct or indirect affiliation.

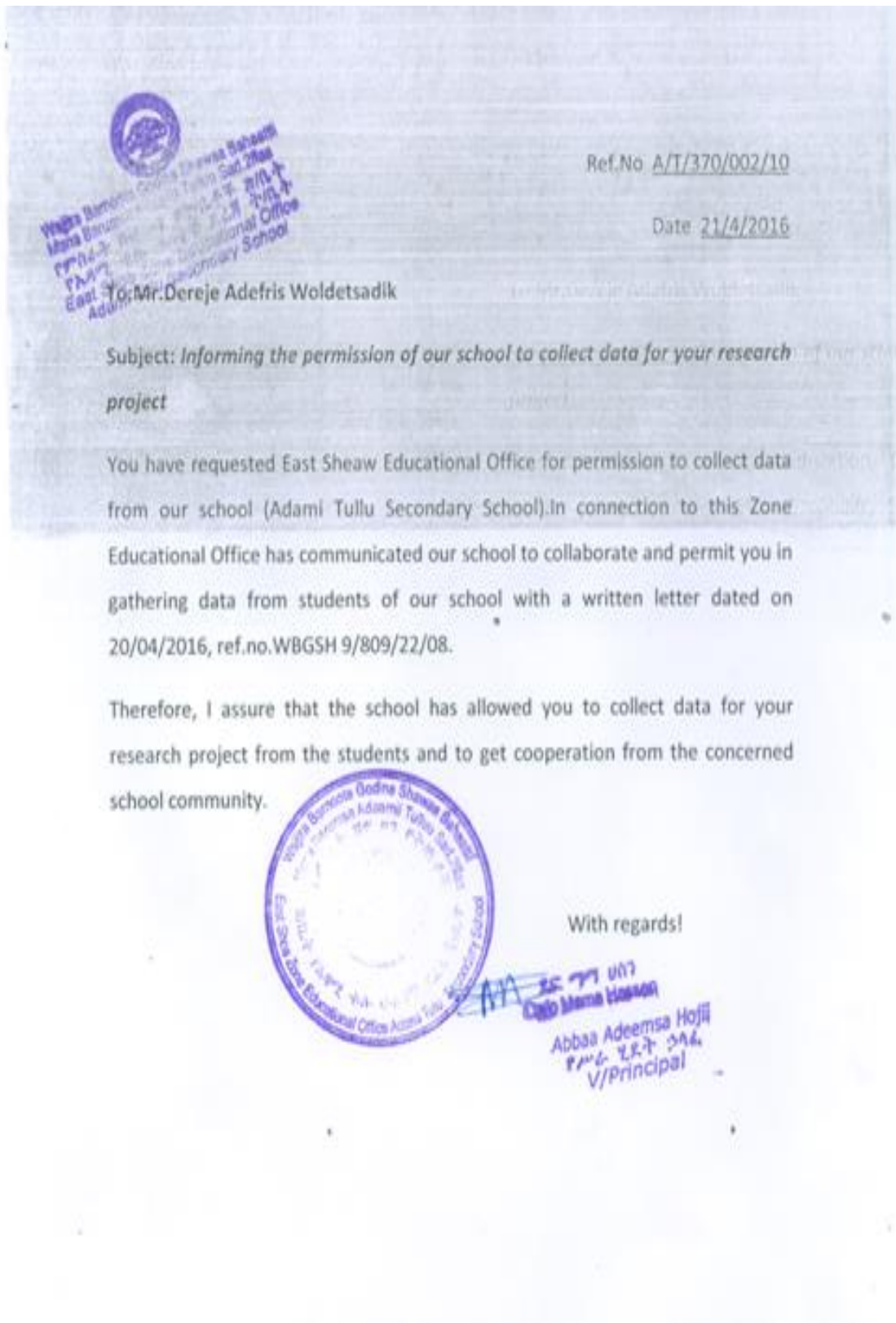
With regards!



  
**Fiqaduu Ajjiboo Dammaqaa**  
ወንጋ ስኬት ስኬት ስኬት



**APPENDIX G Adami Tulu Secondary School letter of cooperation and consent**



**APPENDIX H: Letter of consent from Boset Secondary School to conduct the study**



**APPENDIX I: Mojo Secondary School letter of consent**



Ref. No 17/15/2016/10285/008  
Date 01/10/2008EC

To: Mr. Dereje Adefris Woldetsadik

**Subject:** *Approving your request of collect data for research work*

East Shewa Educational Office has written a letter dated on 20/04/2016, ref. no. WBGSH 9/809/22/08 to Mojo Secondary School informing that you have requested for permission to collect data from our school referring a letter written from your university.

Therefore, I would like to inform you that your request has been acknowledged and permitted. So, you are freed to collect data for your research activities from our students.

With regards!

  
Zinabuu Hamsaaku Moosisa  
ዘ/አ ዘ/አ ዘ/አ  
I/G M/Barumsichaa  
ዘ/አ ዘ/አ ዘ/አ  
School Principal



**APPENDIX J: Awash Melkasa Secondary School letter of consent**



Wajjira Barnoota Aanaa  
Adaametti Mana Barumsa  
Hawaas Malkaa Sa'aa Sad.2<sup>nd</sup>  
የአዳማ ወረዳ ት/ቤተ-ትምህርት  
አ/ቤተ-ትምህርት  
አዳማ ወረዳ ት/ቤተ-ትምህርት

Ref. No M/H/M/S/0089/119

Date 30-09-2008

To: Mr. Dereje Adefris Woldetsadik

**Subject: *Confirming of permission to collect data for your research***

East Shewa Educational Office has written a letter dated on 20/04/2016, ref. no. WBGSH 9/809/22/08 to our school informing that you have requested for permission to collect data from our school.

Therefore, on the behalf of *Hawas Melkasa Secondary School* I confirm that the school has permitted you to collect data for your research work from the students. Besides, you would be provided with the assistance of the school community.

With regards!

  
Bonu Kidanemariam  
Dr. A. A. R. S.  
I/G/Mana Barumsa  
የትምህርት ማኅተም





**APPENDIX K: Oda Bokota Secondary School letter of consent**

  
Bilroo Barnoota Oromiyaatti Godina  
Shawaa Bahaa Aanaa Duggaa Mana  
Barumsaa Odaa Boqotaa Sad 2<sup>nd</sup> Maqil  
በአሮጌ ዓ/ዓ. ትምህርት ቤቅ በማሳሰቅ ዝዋ ዝዋ  
ድረጃ 2<sup>ኛ</sup> ገጽ ገጽ የሌላ ቤቅ  
To: Mr. Dereje Adefris Woldetsadik

Ref. No MB/10/276/07/08  
Date 01/10/2008

**Subject:** *Permission to collect data for your research*

Based on your requested East Shewa Educational Office has informed our school to cooperate and permit you to collect data from students of our school with a written letter dated on 20/04/2016, ref. no. WBGSH 9/809/22/08.

Therefore, I notify that you have given permission to collect data from students of our school (Oda Boketa secondary school) and to get cooperation from school community.

With regards!

  
Dambel markabaa  
ደምሳ ገጽ  
Dura ta'aa Mana Barumsaa  
የትምህርት ቤቅ ርዕሰ መምህር

**APPENDIX L: Adama City Educational Office letter of cooperation to Goro Secondary School**



Wolkite University  
Wolkite  
የወላይት ዩኒቨርሲቲ  
ወላይት

Ref. No. WBBMA/1031/1/35

Date 15/04/2016

To Goro Secondary School

Adama

**Subject:- Informing for permission given to collect Research Data**

Mr. Dereje Adefris Woldetsadik asked our office through a letter written by Adama Science and Technology University with letter Ref. No. PsyD/006/005/2016 on 04/02/2016 to get permission to collect data from your school.

Accordingly, our office allowed Mr. Dereje Adefris collect the necessary data needed for his research work in your school from the concerned bodies. Therefore, you are kindly requested to give him the necessary support on the issues stated in this letter.

Sincerely yours

C.C.

→ ➤ To Mr Dereje Adefris Woldetsadik



6  
Biru Degale Hiro  
Biru Degale Hiro  
06 774 427  
HA. Wanj. Barmenisa B. Adum  
Sup II Hov. Barmenisa  
የወላይት ዩኒቨርሲቲ  
የሥነ-ምግባር ምረቃ ትምህርት

## APPENDIX M: Goro Secondary School letter of consent



Ref. No. HBG/217/4165

Date 24/4/2016

→ To: Mr. Dereje Adefris Woldetsadik

**Subject:** *Notifying the willingness of our school to collect data for your research project*

As indicated in the heading you have requested Adama City Educational Office for permission to collect data from our school (Goro secondary school). In connection to this Adama Woreda Educational Office has informed our school to cooperate and permit you in collecting data from students of our school with a written letter dated on 15/04/2016, ref. no. WBBMA/1031/1/35.

Therefore, I assure that the school has allowed you to collect data for your research project from the students and to get cooperation from the concerned school community.

With regards!



*agany Namodmsaa Gammachuu*  
*ደጋፊ ገዳማዊ ገብረ*  
[Signature]  
[Stamp] *Memo Namodmsaa*  
*Edin amirhat*  
Director

Activate Win

## APPENDIX N: Parents/guardians consent form

በአንጋሊያና በአግዳሚ ወይም በሌሎች ጽንጻ መጠየቅ ይቻላል  
Afan Ingiliffaan, Amaarraam ykn Affaan Orommo ttiin fayyadammu ni dunddessa

### Parents/Guardians Consent form/የወላጆች/የአሳዳጊዎች የስምምነት ፎርም Foormii waliigaltee warraa/warra guddisee

**Dear parents/Guardians of Student**

ወ.ደ. የተማሪ/ Kabajamoo guddiftoota barataa/ttuu \_\_\_\_\_ ወላጆች/አሳዳጊዎች/ገዢ

**Subject/ጉዳይ/ Dhimmi:- Requesting for cooperation /ትብብር ስለመጠየቅ/ Deeggarsa gaafachu ta'a**

*I am Dereje Adefris Woldeamlak, working at Adama Science and Technology University, staff member of psychology department. I am also PhD student at University of South Africa. My PhD thesis deals on the emotion and behaviour of secondary school adolescents in Ethiopia. Currently I am collecting data for my research project from adolescents of some selected secondary schools found in East Shewa Administrative Zone. In this regard, one of the selected students to generate information for my research project is your child. He/she is under 19 years, as a result of this I require your permission and signed consent to collect data from him/her. Therefore, I have sent this consent letter expecting that you will really assist me by giving permission for your child to participate in the research project or to fill in the questionnaire.*

እኔ ደረጃ አደፍርስ በአዳማ ላይንስ ቴክኖሎጂ ዩኒቨርሲቲ የሰይኮሎጂ ትምህርት ክፍል መምህር ስሆን ከዚህ በተጨማሪም በደቡብ አፍሪካ ዩኒቨርሲቲ የዶክትሬት ተማሪ ነኝ። የመመሪያ ጥናት ምርምራዎች በምስራቅ አዋጅ የተመረጡ ሁለተኛ ደረጃ ት/ቤት በሚገኙ ወጣቶች ባህሪ ላይ ያተኮረ ነው። በአሁኑ ሰዓትም ለጥናት ምርምራዎች የሚሆን መረጃ በማሰባሰብ ላይ አገኛለሁ። በመሆኑም መረጃ ስለራሳቸው ባህሪ እንዲሰጡ ወይም መጠይቅ እንዲሞሉ ከተመረጡት ተማሪዎች መካከል አንዱ የእርስዎ ልጅ ነው/ት/። ልጅ ስለራሱ/ሷ መረጃ ለመስጠት/መጠይቅ ለመስጠት ከዛ ለመት በታች ስለሆነ/ች በፈርማዎ የተረጋገጠ የእርስዎ በት ፍቃድና ስምምነት አስፈላጊ ነው። ስለዚህ ይህንን ፈቃድና ስምምነትን ለልጅ በተለከው ፎርም ላይ በመፈረም ቀና ትብብርን እንደሚያደርጉልኝ በመተማመን በእኩብርት እጠይቃለሁ።

*Ami Darajje Adefris, Yunivarsitii Saayinsii fi Tekinolojii Adaamaa tti barsiisaa kutaa barnoota saayikoloojii yoon ta'u, akkasumas barataa Dokitireetii Yunivarsitii Afrikkaa Kibbaatti barachaa jiraa. Qo'annoo fi qorannoon eebba kootiis amala dargaggoota irratti kan xiyyeeffatee Godina Shawa baahaa m/barnoota sadarkaa 2<sup>nd</sup> filataman keessatti. Yeroo ammaa kanas, ragaalee qo'annoo fi qorannoon kiyaafi barbachisan funaamuu irrattiin argama. Kannawaa ta'ee, raga waa'ee mataa isaanii akka kennan ykn gaafannoo akkaguntan barattoota filman keessaa tokko ilma/intala keessanii dha. Daa'imni keessan raga kennuuf gaafannoo guutuuf umiriin isaa/ishee waggaa 19 gadi waan ta'ee/taateef waliigalteen eeyyama fi deeggarsa keessanii mallattoo keessaniin kan mirkanaa'e baay'ee barbaachisa dha. Kanaafuu, eeyyamamaa fi walii galuu keessniif foormii ilma/intala keessaniitti isinii ergamee irratti mallatteessun deeggasa ollaamaa akka naaf gootan kabajaman gaafadha.*

With kind regards/ ከሰላምታ ጋር/ Nagaa waliin!

Dereje Adefris / ደረጃ አደፍርስ /Darajje Adefris



Parent's/guardian's name የተማሪው/ዋ ወላጅ/አሳዳጊ ስም Maqaa abbaa/warra guddisee/	Signature ፊርማ Mallattoo	Date ቀን Gyyyaa
1. _____	_____	_____
2. _____	_____	_____