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LIST OF ACRONYMS

ATT	Aesthetic Trinity Theory
BRECVEM	Brainstem reflexes, rhythmic entrainment, evaluative conditioning, contagion, visual imagery, episodic memory, musical expectancy
GERMS	Generative rules (G), emotional expression (E), random fluctuations (R), motion principles (M), stylistic unexpectedness (S)
EEG	Electroencephalograph
ECG	Electrocardiogram
ESM	Experience sampling method
IPA	Interpretative phenomenological analysis
SEM	Strong experiences of music

Chapter 1
Introduction

1.1 Background and rationale

The inner world of human emotions is familiar to no one but the individual experiencing them. The role of the performer's emotions in a performance may be a phenomenon which proves too intimate for words to fully describe, leaving the performance experience the truest record of their existence (Gabrielsson, 2009). A performance in Western Art Music typically incorporates a music score (a composed piece of music), a performer, and an audience. The performer's task is to breathe fresh life into a music score, transforming it from an academic accomplishment into an animated performance. This presents the performer with two main challenges: first, to convey the composer's musical intentions as precisely as possible to the audience, thereby honouring the authenticity of the score; and second, to give an original account of the score through an emotionally expressive interpretation, thereby reflecting the performer's unique musical personality.

Research suggests that controlling and inducing pleasant emotional experiences in the listener is the most fundamental aspiration among performing musicians (Persson, 2001). But in spite of meticulous concert preparations, professional performers frequently fall short of their own expectations of an expressive performance, and their performances do not bridge the gap between a performance which is "a sum of its notes" and an emotionally expressive performance (Cummings, 2000: 38). The process through which performers express emotions in performance is currently a topic of considerable debate amongst researchers in music psychology. As Sloboda (2005) argues, powerful emotional expression in performance is not a phenomenon that happens spontaneously in performance, nor is it driven by intuition alone. He suggests instead that performers consciously plan the expression of emotion in performance, rather than rely on emotional engagement which may (or may not) occur during a particular performance. McGill (2007: 17) agrees, stating that "professional musicians are not paid to simply feel the music in a public act of exhibitionism and then, by virtue of this, to mesmerize the audience into feeling exactly the same way". He adds that rather than simply feeling their way around the music, performers' successful communication of music's content depends on having a plan for musical phrasing formulated through analysis of the music's structure.

Several studies support this notion that an emotionally expressive performance results from deliberate, conscious awareness and planned expressiveness (Chaffin, Lemieux & Chen, 2006; Juslin, 2001, 2003; Sloboda & Lehman, 2001). Other studies allege, however, that musicians *in general* think that they should experience real emotions in order to perform expressively (Lindström, Juslin, Bresin & Williamon, 2003; Persson, 2001). A recent study suggests that performers' emotional engagement with the music they are performing plays a crucial role during the preparation stages of an expressive performance. However, the study explores performers' emotions in the preparation stages of a performance, rather than the actual performances (Van Zijl & Sloboda, 2011). Very little is known about the relationship between performers and their emotions in a performance.

During a performance, performers' emotional engagement with music appears to differ considerably from that of listeners' emotional engagement. Listeners' responses to music range from "basic" emotions (e.g. happiness, sadness) to more "complex" emotions (e.g. nostalgia, pride), and even "mixed" emotions (Juslin, 2011: 117). The expression of strong emotions in response to music can be overwhelming (Gabrielsson, 2003; Lamont, 2011), and is often expressed physiologically through tears, frowns, chills, or shivers (Bicknell, 2009; Gabrielsson, 2003; Juslin, 2011; MacDonald, Kreutz & Mitchell, 2012; Sloboda, 1991; Sloboda & Juslin, 2001). Listeners can afford to be emotionally overwhelmed by a moving performance, experience (and express) varying degrees of physiological responses, as they play a passive role in the performance. But performers who become overly emotionally involved with the music may become so overwhelmed that they lose control of the technical demands of the performance, break down, and become unable to continue with the performance (Gabrielsson, 2001-2002; Juslin & Timmers, 2010; McGill, 2007). Hodges and Sebald (2011: 206) question whether orchestral performers can feasibly experience the "dizzying profusion" of emotions evident in a Mahler symphony, while still managing to sustain control over their instruments for a full performance. Or whether a solo pianist who is expertly balancing the psychomotor, cognitive and affective skills required for an effective performance, can focus on a particular aspect of performance, such as emotional engagement, while simultaneously maintaining control over the other aspects of performance (Hodges & Sebald, 2011: 233).

Should performers become intensely involved with the emotional content of the music and run the risk of being overwhelmed by their emotional engagement? Performers themselves do

not agree on whether they should strive to *feel* the emotions they wish to portray or communicate in their music performances (Juslin & Timmers, 2010). Some musicians believe that "A musician cannot move others unless he too is moved" (C.P.E. Bach, quoted in Persson, 2001). But what happens then to the performance when the performer is not moved? As the oboist Marcel Tabuteau (in McGill, 2007: 17) asks "If you think beautifully, you play beautiful [sic]. I believe to play as you think because how about the day you are not feeling well?" Other musicians agree with the composer Tchaikovsky, who claims it is not possible to express emotions at the time of the performance. As he stated "Those who imagine that a creative artist can – through the medium of his art – express his feelings at the moment when he is moved, make the greatest mistake. Emotions – sad or joyful – can only be expressed retrospectively*"* (cited by Fisk in Gabrielsson & Lindström, 2001).

There is no current consensus amongst musicians and researchers regarding the extent to which performers experience the emotions they are performing, although it is clear that performers do "engage" with music at some level during performance. There is also no explanation for why some performers deliver powerfully expressive performances, while others do not (Sloboda, 2005: 221). Nor indeed why subsequent performances of a concert programme, performed by the same performer, differ in emotional power. Could their emotions possibly account for this phenomenon?

It is probable that different performers use different methods to construct a musically and emotionally expressive performance. How do they best achieve this? Is it through technical manipulation of musical cues such as tempo, loudness, articulation, and timing, rather than emotional engagement with the music? Or do performers "push" themselves into the emotional state indicated in the score by the composer (Gabrielsson, 2001-2002: 138)? Could other factors play a role in the delivery of an emotionally expressive performance? A precise description of the nature or extent of performers' emotions, and the methods used to communicate their inner feelings – if that is what they are attempting to do – is not evident in the literature.

Juslin (2009a) reflects on the surprisingly rare instances that performers or listeners themselves are consulted on the controversial issues of expression, communication, and emotion. Of the current research which explores emotional expression in music, listeners' perspectives have thus far been the primary focus (Hodges & Sebald, 2011). Studies investigating the performer's perspective on emotional expression in performance have begun

(e.g. Persson, 2001; Van Zijl & Sloboda, 2011), but researchers have stressed the need for more empirical data which will give further insight into performers' experiences (Juslin, 2003; Juslin, 2009a; Persson, 2001). Due to the subjective nature of emotions in general (Sloboda & Juslin, 2001), listeners and performers may perceive emotional expression in a performance differently. A comparison between listener and performer perceptions is not a research objective in this study. This research views the performer as the expert who is able to provide an insider perspective on the performer's actual experience of emotions during a performance. It brings the performer's voice "to the table" and identifies whether, after a specific performance, performers a) felt emotionally engaged with the music during performance, b) considered their performances emotionally expressive, and c) saw a connection between these two phenomena. The performers' immediate recall of their emotional engagement, rather than later reflections on it, is a core aspect of the current research.

The rationale for this research stems from my professional experience both as a performer and teacher. The phenomenon of the performer's experience of emotions during performance is an aspect of performance which was barely addressed during my years as a performance student. With experience, I somehow learned how to manage my emotions – related and unrelated to the music – during a performance. However, when and how this skill materialised is not clearly defined in my memory. The phenomenon of my own emotional engagement during performance, and the significance that it may have in an emotionally expressive performance, was not a concept which I was taught.

This attitude towards the performer's own emotional engagement during performance has not changed much since my undergraduate and postgraduate student years (1986 – 2000). The student pianists I have taught at Rhodes University over the last ten years have expressed frustration at the lack of information in the literature on the phenomenon of the performers' emotions during performance (with the exception perhaps of performance anxiety). By contrast, other aspects of performance, such as technical, musical, and stylistic factors receive considerable attention. When preparing for a performance, teachers and performers focus almost exclusively on these more cognitive aspects of the music, but seem curiously uncertain of how to approach the performer's emotional engagement with the music (Levitin, 2008b). If such a vital aspect of music performance is marginalised, it follows that its development may be compromised and/or delayed. This may result in a number of

unnecessary performance issues related to emotions, such as whether to feel emotions during performance, how to deal with emotions should they arise during performance, whether to control emotions in order to perform optimally, and why emotions are experienced during some performances but not during others.

This research hopes to provide some insight on these questions through in-depth discussions with students and professional performers. Through clarifying how to approach emotions in performance, young performers may be better equipped to consciously prepare this aspect of performance, rather than to view it as a mysterious (and therefore unsettling) variable in a performance. Mastering the emotional aspects of performance may become viewed as a skill which can be studied and acquired, like the cognitive aspects of performance, rather than considered an elusive skill which is acquired unconsciously at some random point in a performance career.

1.2 Aims of research

The main aim of the proposed study is to investigate the role of the performer's emotions in an emotionally expressive performance. The research aims to elicit the performers' personal experience of their performances. It focuses on two aspects of their experiences: first, to discover the extent of the performer's emotional engagement with the music they are performing, and second, to establish what the performers consider the role of these emotions to be in an emotionally expressive performance.

Furthermore, the study aims to contribute data that will potentially supplement other empirical studies of the same kind, and help to gain a deeper understanding of the performer's mental and emotional state during performance.

1.3 Research questions

The main research question is:

To what extent do pianists emotionally engage with the music they are performing during a solo recital?

The main research question can be subdivided into the following sub-questions:

- What kinds of emotions are performers likely to experience during performance?

- What significance do professional and student pianists attribute to the expression of emotion in a performance?
- Is it possible to give an expressive performance without engaging emotionally with the music?
- Should performers attempt to control their emotions during performance?
- How is emotion expressed during performance?
- Are performers emotionally engaged during an optimal performance?

1.4 Methodology

A brief overview of the methodology follows in this section. Chapter 3 contains a detailed and comprehensive account of the methodological procedure.

The research was a qualitative study based on the phenomenological research paradigm. Interpretative Phenomenological Analysis was used to analyse the data.

Two groups of pianists (student and professional) participated in the study: four student participants, and four professional participants. The participants were purposefully selected based on the following criteria:

1) The participants should perform a solo piano recital.
2) The duration of the recital should be 60 – 70 minutes.
3) The research context should be a live performance. All the interviews therefore should be conducted immediately after completion of the solo recital.
4) Performers should be either professional performers or student performers.

The student participants were recruited from the 2011 UNISA National Piano Competition. The professional pianists were recruited from the 2012 International Stellenbosch Piano Symposium, Rhodes University Concert Series, Grahamstown Music Society, and the Grahamstown National Arts Festival.

The data was collected in two phases:

Phase 1: An introductory letter explaining the research was emailed to the prospective participants a few weeks prior to their performances. A questionnaire, consisting of ten general questions, and a letter of consent was attached to the email. Performers who wished

to participate in the research were requested to complete the questionnaire, sign the consent form, and return both documents to me prior to their performances.

Phase 2: Each performer participated in an in-depth, semi-structured interview directly after his/her performance. The interview setting included only the performer and the researcher. All the interviews were video recorded with the participants' consent.

A pilot study was conducted in order to test the effectiveness of both phases of the research design. Two performers participated in the pilot study (one student and one professional pianist). The pilot study revealed that the questionnaire data yielded non-specific information which did not shed new light on the research topic. There was also considerable duplication between data from the questionnaires and the interviews. In spite of duplication I decided to include the questionnaire as part of the research project as it introduced important aspects of the research topic to the participants prior to the interview. It also served a useful purpose during the interviews, as each participant had already offered some unique perspectives in the questionnaire which could then be explored further in the interviews.

The recordings of the in-depth, semi-structured interviews were transcribed. The analysis of the interview data was based on the framework provided by Smith, Flowers and Larkin (2009) and took place in three sessions: reading and re-reading the data, initial noting, and developing emerging themes. The eleven emergent themes were categorized according to three superordinate themes. The themes were written up and presented in Chapter 4.

The research complied with the ethical standards set out by the University of Pretoria. Signed letters of informed consent were obtained prior to the interviews. Participants were assured of anonymity and confidentiality, and the research is therefore published with the use of pseudonyms. Participants were given the option of reading the transcriptions of their own interview before the data analysis began.

1.5 Definitions of key concepts

The following terminology will be used during the course of the thesis (Table 1.1). The definitions were compiled by Juslin and Sloboda (2010: 10) in order to prevent terminological confusion, which has been a major problem in music and emotion research.

Table 1.1: Definitions of key terms as used in the *Handbook of music and emotion* (Juslin & Sloboda, 2010: 10)

Affect	This is used as an umbrella term that covers all evaluative – or 'valenced' (positive/negative) – states (e.g. emotion, mood, preference). The term denotes such phenomena in general. If that is not intended, a more precise term (e.g. mood, emotion, preference) is used instead.
Emotion	This term is used to refer to quite a brief but intense affective reaction that usually involves a number of sub-components – subjective feeling, physiological arousal, expression, action tendency, and regulation – that are more or less 'synchronized'. Emotions focus on specific 'objects' and last minutes to a few hours (e.g. happiness, sadness).
Musical emotions	This term is used only as a short term for 'emotions that were somehow induced by music', without any further implications about the precise nature of these emotions. (If an author believes that there are certain emotions that are 'unique' to music in some way, this is explicitly stated.)
Mood	This term is used to denote affective states that are lower in intensity than emotions, that do not have a clear 'object', and that are much longer lasting than emotions (i.e. several hours to days). Moods do not involve a synchronized response in components like expression and physiology (e.g. gloomy).
Feeling	This term is used to refer to the subjective experience of emotions or moods. Feeling is one component of an emotion that is typically measured via self-report.
Arousal	This term is used to refer to physical activation of the autonomic nervous system. Physiological arousal is one of the components of an emotional response, but could also occur in the absence of emotion (e.g. due to exercise). Arousal is often reflected in the 'feeling'

	component (i.e. the subjective experience).
Preference	This term is used to refer to longer-term affective evaluations of objects or persons with a low intensity (e.g. liking of a particular type of music).
Personality trait	This term is used to refer to relatively stable affective dispositions, which are characterized by low intensity and a behavioural impact which is usually the result of an interaction with situational factors (e.g. a neurotic personality).
Emotion induction	This term is used to refer to all instances where music evokes an emotion in a listener, regardless of the nature of the process that evoked the emotion.
Emotion perception	This term is used to refer to all instances where a listener perceives or recognizes emotions in music (e.g. 'a sad expression'), without necessarily feeling an emotion him- or herself.
Communication	This term is used to refer to a process where a sender conveys an emotion to a receiver who is able to decode the emotion concerned. Note that the term 'communication' is used regardless of whether the transmitted emotion is 'genuinely felt' or 'simply portrayed' by the performer in a symbolic manner. (Music's potential to convey referential information is separate from the issue of whether the music is the result of felt emotion or a sending intention, or both.)

1.6 Chapter outline

Chapter 1 is introductory and includes the background, aims, and research questions.

Chapter 2 provides an overview of the body of literature which relates to emotion, expression, and the performer's experiences. It presents an overview of current theories of general and musical emotions (perceived and induced), measuring emotions (general and musical), performers' experiences of emotions, performers' expression of emotions,

expressive performance, and powerful experiences in music (peak and Flow). In addition, recent studies related to the research topic are reviewed and discussed.

Chapter 3 presents methodological procedures used for this research and includes information regarding the research paradigm, design, participants, data collection, data analysis, pilot project, ethical procedures, and a brief discussion on the validity and reliability of the study.

Chapter 4 presents the results of the analysis. Ten subordinate themes emerged from the data, and these are arranged according to three superordinate themes, which are discussed in three main sections.

Chapter 5 provides a thorough discussion of the emergent themes in relation to the current literature.

Chapter 6 is the concluding chapter of this research and provides a summary of the research, limitations, and recommendations for further research.

The study ends with a list of sources and appendices.

Chapter 2

Literature Review

2.1 Introduction

A musical performance represents the culmination of extensive musical and non-musical preparation by performers. Audience members may admire different aspects of a performer's musical expertise, such as technical mastery, musical sensitivity, stylistic interpretation, temperament, creativity, individuality, and expressive powers. But it is the performer's ability to express emotions, and move the audience, which is most likely to capture the audience's heart (Juslin, 2009a). This is because being emotionally affected by music is one of the principle reasons people engage with music (Juslin, 2011; Krumhansl, 2002; Levitin, 2008b; Persson, 2001; Sloboda & Juslin, 2001; Woody & McPherson, 2010).

Chapter 2 discusses current theories of emotion, expression, and performance within the field of music psychology. The theories address a diverse body of psychological research which includes general emotions, musical emotions, performers' experiences of emotions, expressive performance, emotional expression, and powerful experiences in music (peak and Flow). In addition, recent studies related to the research topic are reviewed and discussed. The chapter concludes with a summary.

2.2 A brief overview of research of emotion in general psychology

Historically, research in human emotions began in the late 19th century, at a time when general psychology focused predominantly on human cognitive processes, such as reasoning, problem solving, and decision-making (Sloboda & Juslin, 2001). Researchers regarded emotional processes as too obscure, subjective, and variable to be scientifically defined and measured (Juslin & Sloboda, 2001). At that stage, human cognition and emotion were not regarded as integrated processes of the brain (Sloboda & Juslin, 2001). The scientific understanding was that emotions were processed predominantly in the subcortical, limbic system, while cognitive processes were processed in the cortical brain (Sloboda & Juslin, 2001). Although researchers did not have a precise grasp of the scope of the divided brain processes, they agreed that they functioned separately, and independently, of each other.

According to Sloboda and Juslin (2001: 73), studies by Darwin (1872), James (1884) and Wundt (1897) contributed to scientific research of emotion in the 19th century. However,

researchers at the time generally preferred to focus on mental processes such as cognitive reasoning, problem solving, and decision-making. Sloboda and Juslin (2010: 934) write that the later "emotion-banning" era of Behaviourism (e.g. Skinner, 1953), followed by the "cognitive revolution" (e.g. Gardner, 1985), significantly inhibited further research of emotion in the 20th century. As Sloboda and Juslin (2001: 74) point out, it is only recently that the role emotions play in human rationality has been reassessed by researchers such as Damasio (1994), De Souza (1987), Johnson-Laird and Oatley (1992), and Simon (1967).

In addition to ideological factors, general psychological research of emotional processes was also restricted by methodological challenges. The main methods of measuring emotions – self-report, expressive behaviour, and bodily responses – were fraught with methodological problems (Sloboda & Juslin, 2010; Hodges & Sebald, 2011). Psychological research of emotions thus lagged behind research of cognitive processes, which were methodologically easier to investigate.

Emotion researchers initially understood emotions to be a sequence of events, although they agreed neither on when the process began or ended, nor the order of the sequence (Sloboda & Juslin, 2001). In 1981, after reviewing 92 textbook, article and dictionary definitions of emotion, Kleinginna and Kleinginna (cited in Sloboda & Juslin, 2001: 75) proposed the following definition of emotion:

> Emotion is a complex set of interactions among subjective and objective factors, mediated by neural/hormonal systems which can (a) give rise to affective experiences such as feelings of arousal, pleasure or displeasure; (b) generate cognitive processes such as perceptually relevant effects, appraisals, labeling processes; (c) activate widespread physiological adjustments to the arousing conditions which may lead to behavior that is often, but not always, expressive, goal-directed, and adaptive.

According to Elliot and Silvermann (2012: 34), a wide range of contemporary philosophical, psychological, and neurological research (e.g. Robinson, 2005; Bicknell, 2009; LeDoux, 1996; 2002; Juslin & Västfjäll, 2008) posits that an emotion is not a thing but a process. Although a consensus on the exact nature of emotion has not been reached, Juslin and Sloboda (2010: 10) summarize the current understanding of emotion as follows:

> This term is used to refer to quite a brief but intense affective reaction that usually involves a number of sub-components – subjective feeling, physiological arousal, expression, action tendency, and regulation – that are more or less 'synchronized'. Emotions focus on specific 'objects' and last minutes to a few hours (e.g. happiness, sadness).

Elliot and Silverman (2012) make a further distinction between emotions and feelings, two

concepts which have not previously been considered as having discernible differences. They explain that emotional responses, activating sensory and chemical-neural systems, can produce significant changes in our body-brain "landscapes" at an unconscious level. But it is only when we become *consciously* aware of our unconscious emotional states that we perceive "feelings". A feeling is therefore a conscious perception of an emotional process. As Damasio (2003, in Elliot & Silvermann, 2012) clarifies, feelings emerge once all processes of emotional arousal have been completed.

2.3 A brief overview of research of emotion in music psychology

The connection between music and emotion is a key aspect of musical experience. Emerging from the prevailing late 19th century ideologies and methodologies of general psychological research, early research in music psychology focused on more rudimentary perceptual and cognitive processes involved in music listening, rather than emotional processes (Juslin, 2011). According to Sloboda and Juslin (2010: 934), music and emotion developed as an independent discipline in the late 19th century following research by Downey (1897), Gilman (1891), and Weld (1912). Despite the pioneering research by Kate Hevner (1935), Melvin Rigg (1940) and Carl Seashore (1938) in the first half of the 20th century, no further research emerged until the books by Meyer (1956), Berlyne (1960, 1971) and Clyne (1977) were published. Significantly, none of this early research aligned music and emotion with mainstream music psychology. Due to conceptual and methodological challenges, music psychologists did not keep up with the discussions taking place in music philosophy, musicology, and aesthetics (Juslin, 2009b). The result was that, as in general psychology research, the scientific understanding of music and emotion lagged behind other aspects of musical science, such as musical cognition and musical development (Juslin & Sloboda, 2001).

Systematic research of the relationship between music and emotions only began in earnest in the early 1990s (Juslin, 2011; Juslin & Sloboda, 2010b). Interest in the study of music and emotion has increased rapidly over the last few decades (Juslin, 2011), and focuses on both listener and performer emotional responses to music. As Hodges and Sebald (2011) point out, however, most of the current research explores the listener's emotions when investigating musical emotions (e.g. Gabrielsson, 2001-2002, 2003; Lamont, 2012; Lindström et al., 2003; Sloboda, 1991; Woody, 2000), while investigations into the performer's emotions are few by comparison (e.g. Persson, 1993, in Persson, 2001; 2001; Van Zijl & Sloboda, 2011). As a

result, very few scientific or psychological explanations regarding whether, how, and why performers experience emotions can be found in the literature. Furthermore, performer-based research has explored performer perceptions of performance in *general*, and has not offered much empirical data of *specific* performances. To date, very little research has considered the emotional impact of a performance on the performer (Lamont, 2012), and identified whether these emotions play a meaningful role in a performance.

In addition to psychological inquiry, the renewed efforts to understand the complex relationship between music and emotion over the last two decades have included research from multidisciplinary viewpoints, including philosophy, musicology, neurology, biology, anthropology, sociology, and music therapy (Juslin & Sloboda, 2001; 2010a). Music psychologists currently investigate emotional processes in addition to cognitive and motor processes involved in human engagement with music, and no longer neglect this core aspect of musical experience (Hodges & Sebald, 2011). The current trend in thinking is that cognitive and emotive functions and responses to music are less separate than previously perceived (Juslin, 2011).

2.4 Theoretical assumptions of musical emotion

The scientific parameters of musical emotion are ambiguous in the literature due to the considerable controversy and disagreement which shrouds the research field (Juslin, 2009b). Juslin and Sloboda (2010: 10) simply define a musical emotion as an emotion which is somehow induced by music, without elaborating on the precise nature of the emotion. Music philosophers debate whether music expresses emotions that listeners simply identify (cognitivist position) or whether music actually induces emotional responses (emotivist position) in listeners (Tan, Pfordresher & Harre, 2010). Questions concerning the kinds of emotions induced by music, the relationship between uniquely musical emotions – if they exist – and everyday emotions, and differences between performer and listener experiences in relation to music remain unanswered in the current literature.

2.4.1 Perceived versus induced emotions

When exploring listener responses to music, Gabrielsson (2001-2002) identifies two separate kinds of emotional responses to music: perceived and induced emotion. Perceived emotion refers to the ability to recognize an emotion in the music, for example sadness, without feeling sad oneself. This supports the cognitivist position which maintains that listeners can

perceive emotions expressed in music without necessarily feeling them (Hodges & Sebald, 2011). Induced emotions are the actual emotions experienced in response to the music, for example, the music causes the listener to feel sad. This supports the emotivist position which contends that listeners may experience real emotions (musical emotions) *in addition to* perceiving the emotions expressed in music (Hodges & Sebald, 2011).

Gabrielsson (2001-2002) posits that the relationship between perceived and induced emotions should not be viewed as opposite extremes on a continuum. Listener emotional responses occur somewhere along the continuum from an emotion-free perception to intense emotional reactions. He suggests four types of relationships between perceived and induced emotion (Figure 2.1). The first type of relationship is referred to as a *positive* relationship: the listener's emotional response correlates with the emotional expression in the music. For example, happiness in the music invokes a happy feeling in the listener. The second type of relationship is called a *negative* relationship: the listener's emotional response does not correlate with the emotional expression in the music. For example: happiness in the music invokes a sad response. The third relationship is referred to as *no systematic* relationship, and refers to two different categories of responses. In the first case, the listener remains in the same mood or stays "emotionally neutral" despite perceiving the emotional expression present in the music. In the second case, an emotional expression may evoke different emotional responses in different listeners at the same time, or in the same listener on different occasions. The fourth type of relationship is referred to as *no relation*. For example, no relationship is possible between variables in the expression and response. Or the emotional responses have no obvious counterparts in the musical expression, e.g. feeling overwhelmed can hardly be expressed in music, at least not with a high degree of listener agreement (Gabrielsson, 2001-2002).

Emotion		
PERCEIVED		INDUCED
	Positive relation	
Happy	→	Happy
Sad	→	Sad

	Negative relation	
Happy	→	Sad
Sad	→	Happy
	No systematic relation (two cases)	
Happy	→	"Neutral"
Sad	→	"Neutral"
Happy	→	Varies for different
	→	listeners and occasions
	No relation	
Not perceived	→	(but) Induced

Figure 2.1: Schematic illustration of four types of relationships between perceived emotion and induced emotion (Gabrielsson, 2001-2002: 131)

2.4.2 Aesthetic Trinity Theory (ATT)

A third alternative to the cognitivist and emotivist positions is Konečni's 2008 Aesthetic Trinity Theory. Konečni hypothesized that emotional engagement with music goes beyond a specific emotion, and is rather a broader, overarching experience (Hodges & Sebald, 2011). He referred to this experience as one of aesthetic awe, rather than an induced musical emotion. Hodges and Sebald (2011: 205) explain awe as a feeling of profound reverence in the presence of sublime objects, including natural wonders such as the Grand Canyon or Niagara Falls, or human artefacts such as the Great Wall of China, St Peter's Cathedral, or the Egyptian Pyramids.

Aesthetic awe, experienced in response to artistic expression, represents the ultimate aesthetic experience, where one may feel overwhelmed or overcome. It dissipates as soon as the artistic expression changes. Aesthetic awe is characterized by feeling profoundly moved or

touched, and is generally accompanied by thrills/chills. Being moved requires a personal associative context, while thrills/chills consist of bodily responses such as crying, a lump in the throat, shivering, a prickly feeling on the back of the neck, tingling along the spine or in the extremities, and goose bumps. Thrills (associated with joy) and chills (associated with fear) can both be reliably measured (Hodges & Sebald, 2011: 205).

Juslin (2011: 128), however, contends that an aesthetic response, such as aesthetic awe, is a detached, or distanced, consideration of an art object that *does not allow* emotions to surface. It therefore cannot replace emotions. Aesthetic awe might co-occur with emotions in response to music, but it is not influenced by emotion or preference, and therefore exists as an independent feature of a musical experience. This allows for an *evaluation* of an art object, such as music, without necessarily an emotional experience. For example, the jury member who evaluates the aesthetic merit of different interpretations cannot afford to allow musical emotions which may occur in response to the music, to cloud an objective assessment of the performer's skill or expertise.

Despite the impact controversies have on how musical emotion is conceived, significant progress in understanding the distinctions between cognitivism, emotivism, and aesthetic awe has been made over the last decade. However, these distinctions have not yet been explored from the performer's perspective.

2.5 Measuring emotion in general psychology

Sloboda and Juslin (2001: 74) describe emotion as both an everyday concept and a scientific construct, possessing an implicit and an explicit body of knowledge. Emotion, as a scientific construct, is inferred from three primary types of behaviour: self-report, expressive behaviour, and physiological responses:

- Self-report, the most common method of measuring emotional responses, uses adjective checklists, rating scales, questionnaires, or free descriptions to collect data. The main problem with this method is that the relationship between words and emotion is not always accurately captured through, for example, inadequate choice of words in a checklist.

- Expressive behaviour such as facial expressions, vocalisations, and body language are observed. A criticism of this method is that emotions are not always accompanied by expressive behaviours.

- Physiological responses such as heart rate, skin conductance, muscle tension, and blood pressure are measured by means of electrocardiogram (ECG), or electroencephalograph (EEG). The shortfall of this method is that autonomic changes occur in the absence of emotion.

2.6 Measuring musical emotions: listeners and performers

According to Juslin (2009b: 132), musical emotions in listeners can be investigated scientifically in several ways, such as listening experiments (Waterman, 1996), questionnaire studies (Juslin & Laukka, 2004), diary studies (Sloboda et al., 2001), qualitative interviews (De Nora, 2000), and brain imaging (Blood & Zatorre, 2001). As these methods each have advantages and disadvantages, Juslin (2009b) advocates combining methods in a "method triangulation" to achieve optimal results. These research methods are however utilized mainly in a laboratory setting, while field studies rely mainly on self-report.

Recently, Juslin et al. (2011) posited that musical emotions do not occur simply in response to musical characteristics, as listeners respond differently to the same music. Furthermore, the same listener can respond differently to the same piece of music in different situations. Arguing that musical emotions arise therefore in a "complex interplay between the listener, the music, and the situation", Juslin (2011: 119) suggests that the *context* of an event, such as activity, location, and social condition, impacts on the occurrence of *specific* musical emotions. Laboratory research data therefore captures only a partial understanding of the processes involved in musical emotions. In order to fully understand all aspects of musical emotions, Juslin (2011) emphasizes that research should include emotions as they occur in everyday contexts. This kind of research has begun, utilizing methods such as the experience sampling method (ESM) (Sloboda & Lehman, 2001; Juslin et al., 2008).

Research of musical emotions in an everyday setting has thus far focused mainly on listeners, as the practicalities of exploring performers' emotions in an authentic context (a performance) are particularly challenging. The performance context prevents the typical methods of data collection through self-report, such as checklists, rating scales, or questionnaires, as performers are preoccupied with delivering a performance, and unable to

describe their emotional responses. To date, performers' perspectives on their performance experiences have not been researched at all.

2.7 Psychological explanations of emotions and approaches to research

Sloboda and Juslin (2010) posit that, from a psychological viewpoint, emotion is a scientific construct that encompasses a set of phenomena of feelings, behaviours, and bodily reactions which materialize as *one process* in everyday life. Emotion psychology seeks to describe these phenomena, and to explain their underlying processes on three different levels: phenomenological level (self-report feelings), functional level (information processing), and hardware level (neurons, hormones, genes). Most psychological explanations of emotion operate at the functional level, but frequently refer to the other levels. According to Frijda (2008, in Sloboda & Juslin, 2010), the structure of the individual, processed information (incoming and stored), and dynamic interactions with the environment are core concepts of psychological theories of emotion.

Emotions in general are understood to be biologically based, and influenced by socio-cultural factors (Sloboda & Juslin, 2010: 75). Related more specifically to the individual, Scherer (1999, in Sloboda & Juslin, 2010: 75) maintains that a frequent source of emotion in everyday life is the individual's cognitive appraisals of events in relation to subjective goals, intentions, motives, and personal concerns. Emotions are therefore not simply explained in terms of objectively defined stimuli, as the stimuli are significant only in relation to how the individual processes them in a specific context (Sloboda & Juslin, 2010).

Sloboda and Juslin (2001; 2010) review three different approaches to the ways emotions are experienced and expressed, and the means by which scientists and lay people conceptualize emotions and differentiate between them:

The *categorical theories* hypothesize that people experience emotions as categories which are distinct from each other. According to this approach, the categories consist of a limited set of five innate, universal emotions, referred to as basic emotions (Sloboda & Juslin, 2001: 76). Psychologists agree that, from an evolutionary perspective, happiness, anger, sadness, fear, and disgust are the five basic emotions (Sloboda & Juslin, 2010: 76). The basic emotions, experienced in daily life, contribute to individual survival, are found in all cultures, are experienced as unique feelings, appear early in development, involve distinct patterns of

physiological changes, can be inferred in other primates, and have distinct facial and vocal expression (Sloboda & Juslin, 2010: 76).

According to Sloboda and Juslin (2010: 77), critics of categorical theories, such as Ortony and Turner (1990), propose that there are different sets of basic emotions. In addition, as Sloboda and Juslin (2010: 77) explain, other critics dispute that five basic emotions do justice to the variety of emotions experienced in everyday life, suggesting that there are as many as 14 (Lazarus, 1991) or 16 (Roseman, Spindel & Jose, 1990) distinct emotions.

The *dimensional theories* identify emotions through focusing on smaller and finer dimensions of emotions such as valence, activity, and potency of an emotion, rather than distinguishing basic characteristics. Of these theories, Russell's 1980 "circumplex" model of emotion has been most influential. Emotions are represented in a two-dimensional, circular space (see Figure 2.2) which measures valence (positive versus negative) and arousal (high or low) on two principle axes (Gabrielsson, 2001-2002). Within this structure, emotions that are across the circle from each other (e.g. sadness and happiness) correlate inversely.

One criticism of the circumplex model maintains that positive and negative affect can be experienced simultaneously, disputing the bipolar valence of the model. Another criticism contends that dimensional models blur essential psychological distinction. For example, angry and afraid (see Figure 2.2) are two emotions which are both high in arousal and unpleasantness, but they have very different implications for the individual. Dimensional models therefore require additional information to add theoretical depth to their assumptions (Sloboda & Juslin, 2010: 78).

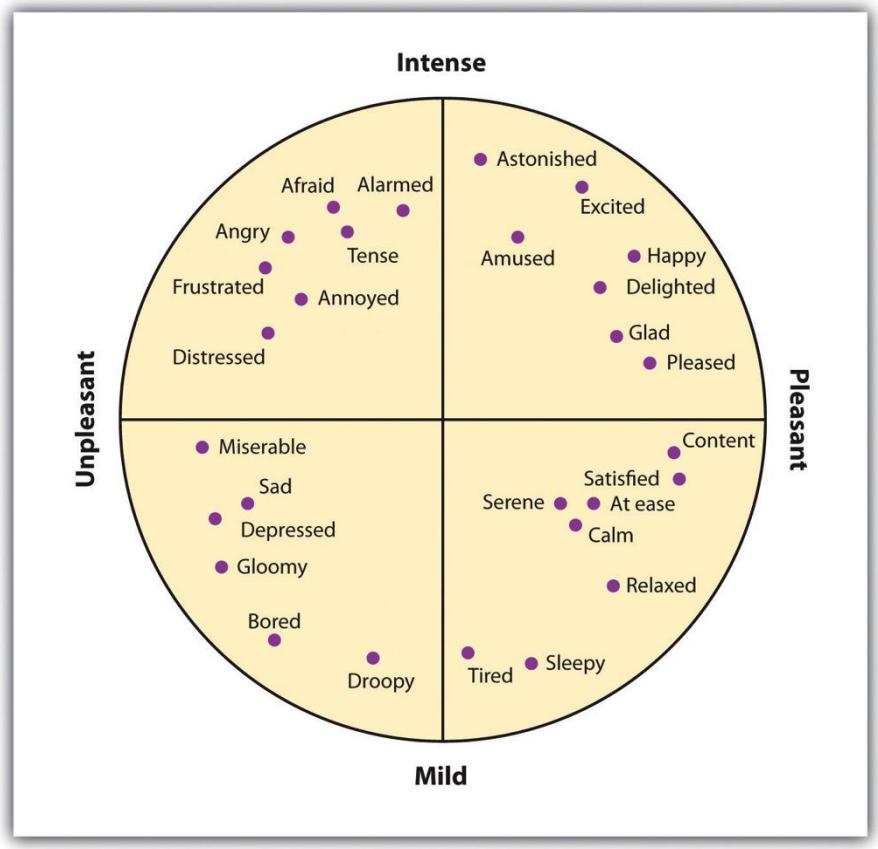

Figure 2.2: A circumplex model of emotion (Russell, 1980 in Sloboda & Juslin, 2010: 78)

According to Sloboda and Juslin (2010: 79), the *prototype theories* propose that language and knowledge structures associated with language, shape the manner in which people conceptualize and categorize information through reference (e.g. Rosch, 1978). For example, membership of a particular category is determined by resemblance to other prototypical exemplars. A prototype is abstract but has a set of features which represent the exemplar of a family of instance. This approach provides a compromise between categorical and dimensional approaches in that it addresses both contents of categories and hierarchical relationships among categories. In comparing musical and non-musical emotions, this approach may provide a structure by which such comparisons can be made.

Arguing that verbal accounts of emotion are often subjective and inaccurate, critics of the prototype approach do not accept that they satisfactorily capture underlying structures of emotions. However, prototype theorists counter that the boundaries between emotion categories are unclear, and claim that emotions cannot be defined in terms of a set of necessary and sufficient conditions (Sloboda & Juslin, 2010: 79).

The question of whether music represents an expressive form of emotion, rather than true emotion, will be discussed in more detail in the next section.

2.8 How are musical emotions evoked?

Researchers approach the question of how music arouses emotions in two different ways. Firstly, research has mapped the factors which appear to influence emotions. Emotional responses to music result from musical, individual, and situational factors (Juslin, 2009b). *Musical factors* refer to the expressive resources which are embedded in the musical score. They provide the structural characteristics of the music, and are referred to as "expressive cues" e.g. tempo, dynamic levels, timing, intonation, articulation, timbre, vibrato, tone attacks, tone decays, and pauses. Performers consciously manipulate these expressive resources in order to enhance the inherent emotional content of the score. Research has identified factors in the *individual* such as age, gender, personality, musical training, music preference and current mood which may influence emotional responses. *Situational factors* which may influence emotions include physical factors (e.g. acoustic and visual conditions, time, place), social factors (e.g. listening alone or together with others), special occasions and circumstances (e.g. vacation), and performance conditions (Juslin, 2009b; 2011).

Secondly, researchers such as Berlyne (1971), Dowling and Harwood (1986), Juslin and Sloboda (2001), and Scherer and Zentner (2001) have attempted to study the underlying mechanisms which account for emotional responses (Juslin, 2011). To date, Juslin et al. (2010) have produced the most comprehensive framework, BRECVEM, which proposes seven mechanisms through which music might induce emotions (Juslin, 2011). These mechanisms are summarized briefly below:

- Brain stem reflex: a quick, automated, instinctive response to a fundamental acoustic characteristic of music, for example, a loud, sudden, dissonant sound, or rapidly changing tempo. Interpreted as dangerous, the brainstem responds at a primary, basic level, producing emotions such as general arousal, or surprise.

- Rhythmic entrainment: an internal bodily rhythm responds to a strong, external rhythm in the music, such as music with a powerful, or accelerating, pulse. The listener's pulse adjusts to the pulse of the music, causing feelings of arousal, communion, and sometimes trance-like altered states of consciousness (for example, shamanic rituals, rave parties).

- Evaluative conditioning: unconscious, unintentional, and effortless emotional responses arise in response to music which has been paired with other positive or negative stimuli. In the absence of the other stimuli, the same emotional responses arise in response to the music.

- Emotional contagion: emotional responses mirror the perceived emotional expression of the music.

- Visual imagery: an emotional response to a visual image conjured up by the listener in response to specific musical features, such as repetition; predictability in melodic, harmonic, and rhythmic elements; tempi.

- Episodic memory: one of the most common sources of emotion in music (according to ESM data), emotions are induced because the music evokes a personal memory of a specific event in the listener's life.

- Musical expectancy: an emotion is induced when a specific musical feature, for example an unexpected change in harmony, violates, delays, or confirms the listener's expectations of the musical progress.

This framework captures many significant aspects of the processes involved when emotions are aroused by music. However, the framework has been constructed from listeners' emotional responses to music. It has not yet been applied to the performer's emotional experience in performance.

2.9 Current theories of emotion in performance

A contentious issue amongst researchers in music and emotion is whether performers should try to identify emotionally with the music and feel the emotion they are attempting to portray, or rely solely on an unemotional, technical use of expressive cues such as tempo, dynamics, or articulations (Gabrielsson, 2001-2002). McGill (2007: 17) questions whether performers' feelings even matter, arguing that "Performers present the music – the audience feels it. Of course, any sensitive musician will always feel something in performance, and this is as it should be. But good, bad, or indifferent, those feelings are incidental".

According to Juslin and Timmers (2010), the performer's felt emotion does not guarantee that it will be conveyed successfully to an audience. Juslin (2009a) argues that in order to perform

optimally, the performer's required psychological state of relaxed concentration is *not compatible* with experiencing certain specific emotions. This suggests that performers therefore communicate, rather than experience, the music's emotional content. Gellrich (in Juslin & Timmers, 2010) posits that powerful emotional involvement may in fact lead to muscle tension, with disastrous effects on the performance. Gabrielsson's SEM data relates that some performers felt so overwhelmed by the musical expression that they were unable to perform adequately, so they simply simulated performing (Gabrielsson, 2009).

Should performers therefore avoid strong emotional engagement with music? McGill (2007: 17) maintains that while the romantic notion of the performer experiencing "rapturous paroxysms or pangs of pain" during performance is compelling, performers must remove themselves from that subjective state of mind. Acknowledging that performers can experience profound moments of ecstasy, he asserts that conscious separation from overwhelming emotion will enable performers to maintain composure and keep control of the instrument. Woody and MacPherson (2010) concur that successful performers do engage emotionally with the music, but that they learn to "manage" their emotions before and during performances, enabling them to mentally and physically carry out the performance. This skill is generally acquired with experience, but is not dependent on it. Williamon (2004, in Woody & MacPherson, 2010) suggests that performers need to find an emotional state for themselves that actually enhances their performance, but does not offer further insight into what this emotional state might be, or how it might be attained. Juslin refers to an interesting notion of *refined emotions* proposed by Frijda and Sundararajan (2007, in Juslin, 2011). This notion refers to the special mode in which everyday emotions are experienced in certain contexts (music, gourmet food, religion), characterized by attitudes of detachment, restraint, self-reflexivity, and savouring (Juslin, 2011: 127). Juslin hypothesizes that this may describe the unique nature of performers' musical experiences.

2.9.1 Performance context

The performer engages emotionally with a musical composition in at least three different contexts: as a listener when first hearing the composition, in rehearsal, and during the performance. Juslin (2011) maintains that the context of a musical experience influences an individual's emotional response to it. This suggests that performance context will therefore play a role in the performer's emotional experience. McGill (2007: 12) writes that

> Audience members often believe that because they feel a relaxed pleasure in music's performance, the performers are feeling exactly the same way. But it is discipline, risk-taking, intense concentration, and the struggle and search for beauty that provide whatever satisfaction – or, more often, dissatisfaction – the discerning musician experiences before, during, and after the concert experience. In concert, pleasure is the audience's rightful dividend, but the professional musician is engaged in a higher quest.

In a performance context, it seems unlikely that an intensely emotional experience during performance is conducive to an expressive performance, given the complex motor, cognitive, and emotional functions that the performer is manipulating. But very little is known about this phenomenon. If performers' emotions do occur in performance, researchers still need to address a number of related questions, such as: how do performers' emotions compare with emotional engagement in other contexts (musical and everyday); how do performers evoke the emotions required to move an audience without becoming emotionally aroused or overwhelmed; can performance emotions be reliably measured; and what kind of impact do performers' emotions have on a performance?

2.9.2 Performers' views on emotion in performance

According to Juslin and Timmers (2010) there are many historical accounts which describe performers' views on performance expression, including how performers attempt to enhance emotional expression. However, these insights are not scientifically evaluated and cannot be used for the purpose of this research. But psychological research of music and emotion has generated some interesting, if conflicting, perspectives on emotion in performance from performers. When asked to comment on whether they experience emotions in performance, performers offer remarkably diverse opinions. For example, some performers say that if one were truly experiencing an emotion such as grief, it would be extremely difficult to play an instrument or sing (Hodges & Sebald, 2011). Yet other performers claim that, like method actors, they do in fact feel the emotions they are trying to express (Hodges & Sebald, 2011). Several researchers (Cook & Dibben, 2001; Lindström et al., 2003; Persson, 2001) affirm that musicians generally believe that performers must experience emotions in order to be able to perform expressively. It is important to note, however, that the musicians' opinions were offered in response to general inquiry, rather than in relation to specific performances. As such, the assertions do not specify the precise context of the experienced emotions, leaving a blurred impression of the experience of these emotions.

2.10 Performance expression

Performers who play the notes and rhythms of a composition correctly, but neglect musical expression, are described as mechanical by teachers and audiences (Hodges & Sebald, 2011). The expressive qualities of music have been discussed by philosophers and music theorists since the beginning of time (Gabrielsson & Lindström, 2010). Music may express, reflect or represent events or situations, motion, dynamic forces, human character, personality, social conditions, religious faith, and most significantly, emotions (Gabrielsson, 2009). Gabrielsson and Lindström (2010) identify emotional expression as a key aspect of musical expression. But do performers need to feel emotions in order to express? Highlighting the distinction between performer and listener experiences of emotional expression, McGill (2007: 19) points out the critical difference between "feeling the music, as audience members do, and unleashing the expression within a composition, which is what performers should do".

Expression in music is inferred from a number of components. Lindström et al. (2003) suggest that the term "expression" refers to 1) the systematic variations in acoustic parameters (tempo, dynamics, articulation, timing, timbre) that differentiate one performance from another, 2) the fact that music performances are perceived as expressive of emotion by listeners, and 3) the musical sensitivity of the performer. Juslin and Timmers (2010: 454) describe performance expression as a multi-dimensional phenomenon consisting of subcomponents that make distinct contributions to the aesthetic impact of a performance. This theory is based on Juslin's (2003) model which distinguishes five main sources that contribute to the aesthetic impact of a performance. Known as the GERMS model, it describes each of the five subcomponents as having different characteristics, different origins, and being processed differently in the brain (Juslin & Timmers 2010: 455). Juslin and Timmers (2010: 455) summarize the GERMS model as:

- Generative rules (G) that mark the structure in a musical manner (Clarke, 1988). By means of variations in such parameters as timing, dynamics, and articulation, a performer is able to highlight group boundaries, metrical accents, and harmonic structure.
- Emotional expression (E) that serves to communicate emotions to listeners (Juslin, 1997a). By manipulating features of the performance such as tempo or loudness, a performer might (explicitly or implicitly) attempt to render the performance with an emotional character that appears suitable for the piece in question.

- Random fluctuations (R) that reflect human limitations in motor precision (Gilden, 2001). It has been shown in several studies that when expert musicians try to play perfectly even time intervals, they still show small, involuntary fluctuations in timing.
- Motion principles (M) that hold that tempo changes should follow natural patterns of human movement or "biological motion" in order to obtain a pleasing shape (Shove & Repp, 1995).
- Stylistic unexpectedness (S) that reflects a performer's deliberate attempts to "deviate" from stylistic expectations regarding performance conventions, to add tension and unpredictability to the performance (Meyer 1956, p. 206).

The components are only separated for research and teaching purposes, and are understood to combine effortlessly in a performance. According to Juslin and Timmers (2010), performance expression depends *both* on the composed structure and on its realisation in performance (Juslin & Timmers, 2010). Prior to a composition's realisation in performance, performers spend a period of time studying the composition. Chaffin, Imreh and Crawford (2002: 239-246) studied the process through which the pianist Gabriella Imreh learnt and performed the third movement of J.S. Bach's *Italian Concerto*. Six stages in the process of preparation for a performance (from memory) were identified. These stages included:

1) scouting it out: the pianist played the whole piece through in the first practice session in order to identify the main structure
2) section by section: the pianist worked on the piece in sections, deciding on appropriate fingerings, overcoming technical obstacles, and establishing motor memory
3) gray stage: the pianist concentrated on mastering earlier technical and motor decisions so that they would become fluent and automatic in performance. Technical challenges, and musical interpretation remained the focus of this stage
4) putting it together: the pianist attempted to play her unique interpretation of the piece from memory
5) polishing: the pianist practiced slowly and performed for informal audiences in order to refine her interpretation and improve performance confidence

6) maintenance: the pianist played through the piece from time to time in order to maintain the level of expertise required in a performance.

According to Chaffin et al. (2002; 2006), expert musicians form their interpretations through studying "performance cues": basic cues e.g. fingerings, technical challenges, and note patterns; interpretative cues e.g. phrasings, dynamic emphases, dynamic changes, and tempi; and expressive cues e.g. musical emotions the performer wishes to communicate to the audience. Juslin (2003) states that an interpretation is the individualistic shaping of a piece according to the musical ideas of the performer, and is formulated throughout *all stages* of preparation. Interpretation might involve the intention to express something, such as an idea or emotion, beyond the musical structure, but such an expression is usually accomplished through the ways in which the structure is articulated (in how it is played). The process of interpretation appears to be influenced by both "internal" factors (e.g. emotions, wanting to express something personal) and "external" factors (e.g. the musical style, the structure of the piece, the composer's intentions).

Chaffin et al. (2006) suggest that performers focus on performance expression primarily during the final stages of practice, rather than systematically engaging with emotional expression throughout all the stages of performance preparation. But when exploring the relationship between the performer's emotions and an expressive performance, Van Zijl and Sloboda (2011) contend that a musically expressive performance is the desired outcome of an interpretation. If an interpretation, based on structural and musical choices, is influenced by emotions, there is a strong implication that performers do engage emotionally through all stages of performance preparation.

2.11 Performance specific research

Listeners perceive music as expressive of emotions as a result of an expressive performance (Juslin & Timmers, 2010). This means that the performer plays a vital role in the communication of emotions to the listener. Music psychologists have researched how performers deliver an emotionally expressive performance in different ways. Theoretical approaches (Gabrielsson, 2001-2002; Juslin, 2001; Juslin, 2003; McGill, 2007) and empirical studies (Chaffin et al., 2006; Sloboda & Lehmann, 2001) claim that deliberate, conscious awareness and planned expressiveness account for an expressive performance. Qualitative studies by Lindström et al. (2003), Persson (2001), and Woody (2000) suggest that musicians

think they must experience emotions in order to perform expressively. Recently, Van Zijl and Sloboda (2011) found that student performers experience musical and non-musical emotions to varying degrees during the construction stages of a performance. Three of these studies which relate directly to the current research are presented in more detail below.

In an unpublished study conducted in 1993, Persson explored the emotional aspects of conceptualizing music for a performance (Persson, 2001). He asked 15 pianists from a tertiary British music institution to practice the *Prelude* in E-flat Major, Op. 31 No. 1 by Glière for two weeks, then perform, record, and discuss the experience with him in an in-depth interview. The piece, selected for its interpretational ambiguity, was unfamiliar to all the participants. The composer's name, the title of the piece, and all interpretational cues were erased from the score. The participants were asked to interpret the piece as freely as possible, without regard for conventional styles of interpretation. The participants were also asked to provide their own descriptive title for the piece, as it was believed this may reveal something of the process involved in the musician's individual interpretation. This theory was based on Seashore's (1967) assertion that musical *imagery* is a necessary part of musical memory.

The analysis of the interviews revealed two significant results. Firstly, the performers selected titles according to four main criteria: semblance (extra-musical association), mood (focus on affective response to music), idiom (stylistic identification in music), and structure (structural properties in the music). Furthermore, the performers all appeared to use *imagery* in learning and construing understanding and meaning in music. These findings suggest that learning a piece of music entails a "framework of memories" more extensive than issues related to pitch, dynamics, timbre, and social conventions of interpretation" (Persson, 2001: 281). Secondly, the performers described how they consciously manipulated emotional memory (emotions triggered by structural cues in the music) and memory of an emotion (recall of emotions unrelated to the music) in order to evoke the "state of mind" (or mood) most appropriate to practicing or performing the piece. This suggests that performers' emotions (related and unrelated to music) play an integral role through all preparation stages of a performance, including the performance.

A limitation of this exploratory study is the research setting. While affirming that a relationship between music and emotion exists, the research findings are compromised by the unauthentic preparation and performance contexts. Unlike normal procedure in a real-world

situation, the performers did not select a composition they responded to emotionally, nor could they form an interpretation according to the composition's structural cues (these had been erased from the scores). The selected composition was not performed in public, and most significantly, the performances ranged in duration from between 1' 06" and 2' 40". Performers generally grapple exclusively with performance anxiety during the first couple of minutes of a performance, before engaging fully with the music. Their emotional responses during such short time periods would therefore not be a true reflection of their emotional engagement with music. While the research findings reflect some of the ways in which performers identify, interpret, and conceptualize emotions when preparing for a performance (even when it is not their preferred choice of piece), they do not provide true insight on emotions during performance.

Lindström et al. (2003) explored how emotional expressivity in performance is approached in the everyday practice of student performers (classical and popular). They conducted a survey with 135 expert performers from music conservatories in England, Italy and Sweden. The students were asked to complete a questionnaire designed to cover four main categories of themes: a) how music students define and conceptualize expressivity; b) how they practice and apply expressive skills in everyday practice; c) how they are being taught expressive skills through music education; d) how they appraise the possibilities of using novel techniques, such as feedback from computers, in teaching expressivity.

Findings from the first category (how music students define and conceptualize expressivity) revealed that musicians defined "playing expressively" largely in terms of "communicating emotions" (44%) and "playing with feeling" (16%). The first group (44%) concentrated on conveying something to the audience, while the second group (16%) focused on the performer's feelings. A third group (34%) provided answers which focused on structural aspects of the music itself, and the final group (6%) did not answer the question. Interestingly, 83% of the performers acknowledged their intention to consciously try to express specific emotions in their music performance "always" or "often". The students also indicated that expressivity is seen as the most important characteristic in a performance. Significantly, when asked what music should express, performers chose emotion most frequently (99%).

The findings from the second category (everyday practice and application of expressivity) revealed that 92% of the students believed they expressed emotions without consciously

thinking about it (8% did not). The majority of the students claimed that they *feel* the emotion while playing (Always 23%, Often 65%, Seldom 12%, Never 0%). Moreover, 60% of the students regarded it as necessary to feel the emotion in order to communicate it successfully to the audience.

The findings from the third and fourth categories do not fall within the scope of this research. Lindström et al. (2003: 38) draw some initial conclusions from the research which relate to the current research. Firstly, music students regard expressivity as a crucial aspect of music performance, ranking it as the highest priority of performer characteristics (as opposed to theoretical knowledge which was ranked the lowest). Secondly, students define expressivity largely in terms of "communicating emotion" and "playing with feeling". Hence, emotional expression is considered a crucial aspect of the multidimensional phenomenon of expressivity. The findings suggest that students often try explicitly to express specific emotions through the performance of a piece, and that many students also feel the emotions while actually playing. However, Lindström et al. (2003) state that the students' adherence to the notion that a musician needs to be moved in order to move an audience was not supported by sufficient evidence.

The research by Lindström et al. (2003) focused on student performers' insights on musical expressivity and related concepts *in general*. It did not offer the performers the opportunity to consciously monitor their emotional responses in a real-world situation (i.e. a concert). The student performers' notion that they must "feel" an emotion in order to express it may prove unreliable if investigated within a real-world paradigm. The research also did not explore professional pianists' opinions, thus limiting the findings to those of students only.

Van Zijl and Sloboda (2011) explored the relationship between performers' experienced emotions and the construction of a musically expressive performance. Eight music students participated in a 3-phase study: an introductory, semi-structured interview; an individual playing/practice diary which monitored practice sessions (over a period of a week); an in-depth semi-structured interview based on the diary. The students played different instruments which included violin, cello, flute, trombone, trumpet and piano. The research investigated whether performers' experienced (induced) emotions play a role in the construction of a musically expressive performance.

The findings reveal four phases in the process of constructing an expressive performance: initial exploration of the piece; mastering technical difficulties; constructing an expressive interpretation; constructing an expressive performance. The findings distinguish between two categories of emotions: embedded emotions (perceived) in the music, and the performers' own (induced or felt) emotions. The second category of emotions, the performer's own emotions, is further divided into two sub-categories: practice-related emotions (e.g. frustration at technical difficulties) and music-related emotions (e.g. aesthetic delight). The intensity of the emotions appeared to depend on the phase of performance construction. As the performer progressed through the phases, "feeling" the music-related emotion transformed into "knowing" the music-related emotion. This meant that the performers experienced music-related emotions *less intensely* as their preparation for their performances progressed. In the fourth stage (construction of an expressive performance), the expressive interpretation was prioritized, some felt emotions were "added", and the performers consciously attempted to maintain control of their performances.

A finding which relates to the current research is the student performers' distinction between "emotional playing" and an "expressive performance". Emotional playing is described as "just feeling and enjoying the music" and seems to be primarily present during the earlier phases of the constructive process. An expressive performance, on the other hand, includes a sense of awareness of the act of performing as well as engaging with the emotions present in the music, suggesting different levels of emotional processing. Significantly, performers preferred to concentrate on accurately conveying their final musical interpretation to the audience, rather than experiencing strong personal (music-related) emotions.

The performers' musical interpretations were based primarily on their own feelings (i.e. how they thought it should sound), the composer's intentions (perceived in the score), and stylistic observations. However, if the performer's and composer's feelings did not correlate, the performers compromised their feelings in order to convey the composer's intentions. This is supported by similar research findings by Juslin (2001) and Persson (1993, in Persson, 2001).

The findings from the first three phases of the research suggest that the performer's (music-related) emotions play an important role in the construction of the performance, especially in relation to "interpretative cues" and "expressive cues". However, the final phase of the research project – which specifically investigated the performance phase – was conducted during the participants' lessons with their teachers, rather than in a real-world performance

context. This compromises the findings considerably as it cannot be assumed that a performer will have the same emotional experience in a studio as on the concert platform.

A further limitation of the research is the sample of participants. Firstly, the research participants were all students, leaving the professional performer's more experienced insights unexplored. Secondly, the sample of performers was small and diverse (generating data sometimes from only one representative of an instrumental group), rendering the data very subjective.

Thus the findings did not satisfactorily clarify whether performers should feel the emotion they are attempting to portray through the music *during performance* in order for the performance to be emotionally expressive. Performers' musical emotions which occur in an authentic performance context should be investigated in order to fully understand all aspects of the role emotions play in a performance.

2.11.1 Summary of limitations of current studies

While providing some initial insights into the performer's experience of musical emotions, all three studies share similar limitations. Firstly, not one of the research settings was an authentic performance context, therefore the research findings reflect more on performers' engagement with emotions during preparation stages rather than during performance. Secondly, the research did not explore professional pianists' opinions, but based conclusions exclusively on student insights. Thirdly, with the exception of Van Zijl and Sloboda's (2011) research, the research focused on performers' insights on musical expressivity and related concepts in *general.* Finally, the samples of performers from Persson (2001) and Van Zijl and Sloboda's (2011) research are small, and require further research to explore their findings more objectively.

2.12 Optimal performance: peak experience, peak performance, Flow

Performing a beautiful melody can induce an even more powerful experience for the performer than listening to the melody (Woody & McPherson, 2010). The nature of the performer's powerful experience includes heightened emotional rewards beyond those of music making (Beiley & Davidson, in Woody & McPherson, 2010), and is often a primary performance motivation (Persson, 2001). Do performers always experience powerful

emotions when performing, or are they specific experiences which arise during optimal performance? How can these experiences be understood?

Optimal performance means performing at one's best, the result of which is a profoundly satisfying feeling of having reached a goal or fulfilled a dream. According to Harmison and Castro (2012: 708), research into optimal performance (Csíkszentmihályi, 1990; Maslow, 1968) has focused on three overlapping facets under the overarching term of optimal performance, each of which describes optimal performance differently: peak experience, peak performance, and Flow.

2.12.1 Peak experience

In 1954 humanistic psychologist Abraham Maslow described intensely powerful experiences in everyday life as *peak experiences,* which he originally associated with self-actualization (Gabrielsson, 2010). In 1968 he used the term peak experience to describe a blissful moment of profound happiness, fulfilment, and transcendent ecstasy (Maslow, in Hodges & Sebald, 2011). More recently Whaley et al. (2009) describe peak experiences as the antithesis of mundane, difficult to forget, indescribable, unpredictable, non-volitional experiences which cannot be generated. They are desirable and positive, and include a loss of fear, anxiety, inhibitions, and doubts (Maslow, in Gabrielsson, 2010).

Peak experiences are characterized by total attention on the object in question, complete absorption, disorientation in time and space, transcendence of ego, and identification or fusion of the perceiver and the perceived (Maslow, in Gabrielsson, 2010). Peaks contain strong and distinctive perceptual, cognitive, physical, and emotional components which make them intensely enjoyable to the person experiencing them (Whaley et al., 2009). As Maslow (in Hodges and Sebald, 2011) explains, peak experiences produce a heightened sense of an individual's physical and "existential" state of being, a sort of positive hyper self-awareness.

2.12.1.1 Peak experience in music listening

According to Whaley et al. (2009: 455), research in peak experiences (e.g. Maslow, 1976; Panzarella, 1980; Laski, 1961; Gabrielsson, 2006) covers a range of musical genres, including classical, rock, folk, jazz, popular and other genres. Extending Maslow's (1968) research, Panzarella (1980, in Gabrielsson, 2010) investigated intense or joyful experiences

of listening to music or looking at art of a group of visual artists and musicians. Panzarella proposed four major dimensions of the experience:

- *renewal ecstasy* (a new or altered perception of the world, and a desire to engage further with the artistic medium);
- *motor-sensory ecstasy* (physical elements such as tears, altered heart rhythms, chills, or quasi-physical elements e.g. a floating sensation);
- *withdrawal ecstasy* (perceptual narrowing where everything except the object i.e. music or art disappeared leaving perfect focus on the object);
- *fusion-emotion ecstasy* (fusion between the medium and the individual, described as becoming "one" with music or art).

Panzarella asserts that peak experiences are characterized by three distinct temporal stages: initial cognitive response and loss of self; climax with continued loss of self, including motor and emotional response; and self-transformation. He also argues that during peak experiences, individuals function in an unusual, as opposed to intensified, mode of behaviour (1980, in Whaley et al., 2009).

According to Whaley et al. (2009: 453), Gabrielsson and Lindström-Wik (1993, 2000, and 2003) have proposed the most comprehensive study of powerful experiences with music. Their project – Strong Experiences of Music (SEM) – was designed to explore exceptional experiences with music over a period of 10 years. Peak experiences which occur during musical engagement were found to consist of a diverse set of characteristic elements, categorized into a three-level hierarchy. The top, and most general hierarchy, includes seven categories which capture the most common attributes of peak experiences:

- general characteristics.
- physical reactions: internal responses such as chills/thrills, tears, changes in breathing, heart rate, body temperature; overt actions such as singing, shouting, jumping or dancing; physical immobility, or a desire to be alone; and a set of quasi-physical reactions e.g. the body has merged with the music, or transcended time or space (an out-of-body experience).
- perceptual phenomena: auditory, visual, tactile, kinaesthetic, synesthetic, intensified or multimodal perception, and musical perception-cognition elements. The auditory musical

perception-cognition perception may be accompanied by strong visual impressions, tension or relaxation of the muscles, or an intensified sense of perceptions. Performers and listeners describe a sense of being "embedded in the sound" (Boyd and George-Warren, 1992, in Whaley et al., 2010: 467).

- cognitive category: includes elements such as a changed attitude, or changed experience of situation, body and mind, time and space, or wholeness, a loss of control, a changed attitude to music, a connection to old associations, memories, and thoughts, cognitive imagery, and musical cognition-emotion.
- emotional elements: includes strong or intense emotions which may be positive (e.g. joy, happiness, peace, calm, rapture and euphoria), negative (e.g. loneliness, sadness, anxiety, anger) which are typically related to personal or circumstantial factors, not the music, and mixed emotions e.g. mix of positive affect and negative social or personal circumstances. For the majority of people, however, peaks are accompanied by unusually positive emotions.
- existential and transcendental aspects: includes reflections on human life and existence, cosmic experience, experience of other worlds, religious visions, and encounters with the divine.
- personal and social aspects: includes feelings such as feeling liberated, uplifted or cleansed, getting new insights, hope, power and increased self-esteem.

2.12.2 Peak performance

Harmison and Casto (2012: 709) emphasize that peak performance and peak experience are not synonymous, because even a mediocre performance can make one feel happy and elated. Peak experiences may be emotionally enjoyable but they are not necessarily associated with expertise or performance excellence. Peak performance is associated with a high standard of achievement rather than with a psychological state such as elation (Jackson, 1996: 76). Unlike peak experiences, which are highly emotive, peak performance is performance-related to superior physical functioning. For athletes, peak performance is associated with high energy, control, confidence, relaxation and enjoyment (Jackson & Kimiecik, 2008). A peak experience may result from a peak performance, but this is not guaranteed.

Although Gabrielsson (2011) asserts that powerful emotional responses to music occur when listening to music, he adds that some of the most intense responses are experienced by performers. Performers describe such experiences as "magic moments" where everything

works. The performance proceeds without problems, and the performer feels removed from the task of playing, almost as if someone else is taking care of the performance. Performers described feeling that they suddenly understand the music more fully, and are at one with the music. One example was of a pianist who, when practising one of Bach's preludes and fugues, felt infused with the composer's spirit and the music became self-evident. Another example was a singer who felt as if he embodied the music, became part of the song, and did not feel as if he was performing it but rather experiencing it (Gabrielsson, 2011: 566).

2.12.3 Flow

Following in Maslow's footsteps, Csíkszentmihályi (1975) first developed the concept of Flow after studying autotelic and self-motivating activities. Flow is a psychological state in which the performer experiences an optimally positive performance state, characterized by intense focus and creative engagement. Bakker (2005: 27) writes that the most prominent definitions of Flow seem to have three common components: absorption or "total immersion in an activity", enjoyment, and intrinsic motivation. Music is one of the activities which is said to provoke Flow and peak experience most often (Lowis, 2002).

The concept of Flow is similar to the concept of peak in that it involves an intense yet effortless involvement in an activity, an experience which is so enjoyable that people do it for the sheer sake of doing it (Csíkszentmihályi, 1990). However, unlike peak experiences which do not depend on skills or pedagogy (Whaley et al., 2009), Flow occurs when an individual's skills and the challenge presented by a particular task are perfectly matched. Individuals achieve a self-rewarding feeling of Flow when they are so absorbed in an activity that they lose self-consciousness, feel a merging of awareness and action, and even lose track of time (Csíkszentmihályi, 1990).

Csíkszentmihályi (1990) identifies two aspects which result from engaging in a task, pleasure and enjoyment. Pleasure refers to the feeling of contentment achieved whenever conscious expectations, set by biological programmes or social conditioning, are met. For example, when hungry, the taste of food is pleasant because it reduces a physiological imbalance. Pleasure helps to maintain order, but by itself cannot create new order in consciousness (1990). Enjoyment, characterized by a sense of novelty, is a feeling of accomplishment which may overlap with pleasure. An enjoyable event stretches the person's abilities beyond what was previously achieved or imagined. Therefore, while the event, challenge or new goal is

not necessarily experienced as pleasurable at the time, on completion, it is reviewed and categorized as enjoyable. Individuals experience a personal sense of change or growth, and therefore, happiness (1990).

2.12.3.1 Dimensions of Flow

Based on numerous studies of Flow in various contexts, using questionnaires and conducting interviews with people from various walks of life and professions, Csíkszentmihályi (1990) divided the characteristics of Flow into nine dimensions: challenge-skill balance, action-awareness mergence, clear goals, unambiguous feedback, concentration on the task at hand, sense of control, loss of self-consciousness, transformation of time, and autotelic (intrinsically rewarding) experience.

The challenge-skills balance is essential to the experience of Flow, particularly when a high level of challenge and skills is required. Csíkszentmihályi (1990) explains that if a task is too challenging or difficult, one could experience feelings of stress and anxiety. Similarly, if the task is too easy it could result in boredom and apathy, and Flow would not occur (see Figure 2.3). Either case results in diminished motivation and emotional engagement for pursuing the activity (Woody & McPherson, 2010). The balance between skill and challenge is therefore fundamental to Flow, and this explains why Flow is more likely to occur during a challenging or competitive activity.

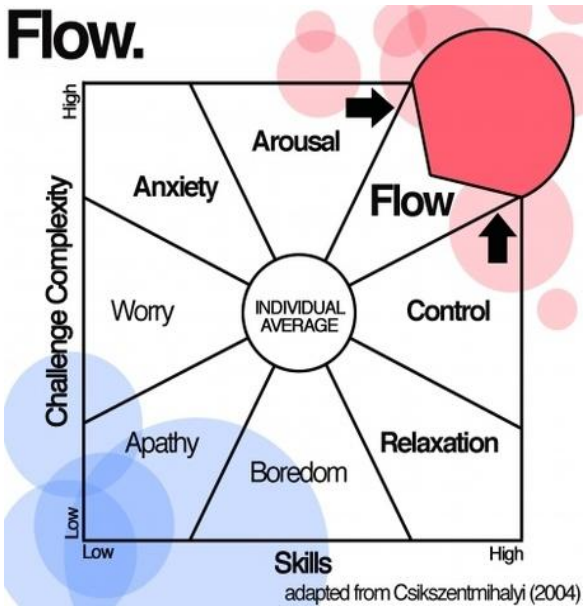

Figure 2.3: Flow model

The merging of action and awareness occurs when an activity presents challenges that require an individual's complete focus in order to succeed, resulting in complete absorption in the activity. It is often described as the performer "getting lost" in a performance. Csíkszentmihályi (1990: 54) writes that although Flow seems effortless, it is not, and often needs strenuous physical effort or highly-disciplined mental activity. There is no surplus energy which allows one to process any information other than what is required by the task. A lapse in concentration will bring one out of the state of Flow.

The term 'clear goals' refers to knowing what the objectives of the activity are and having an understanding and awareness of the preparation, planning and details required for optimum performance. If the expectations and rules of a task are discernible, and its goals are attainable and aligned appropriately with an individual's level of skills and abilities, the individual will sustain peak concentration, and a Flow state will ensue. However, the goals of an activity (such as a creative activity) are not always clear, and unless an individual learns to set goals and to recognize and gauge feedback, the activity will not be enjoyable (Csíkszentmihályi, 1990: 55; Jackson et al., 2001: 142). Clear focus and purpose occur throughout the performance and keep the performer in a state of peak concentration.

Unambiguous feedback is important in determining whether one is on track. Feedback informs individuals of their performance success, dictates whether to adjust or maintain the current course of action, and thereby directs individuals towards their goals. Goals are an intrinsic motivational factor, whereas feedback affirms progress and achievement (Jackson & Kimiecik, 2008). Clear, positive feedback can come from a variety of external sources, such as the audience, peers or the teacher. However, almost any kind of feedback can be enjoyable, provided it is linked and related to a goal in which one has invested time and energy (Csíkszentmihályi, 1990: 55).

Concentration on the task at hand refers to the performer's ability to focus exclusively on the specific task being performed, losing awareness of everything external to the activity itself, including self-awareness. Deep concentration is a hallmark of the Flow experience and a requirement for merging action and awareness (Csíkszentmihályi, 1990).

The paradox of control is how Csíkszentmihályi (1990) describes the Flow experience as the feeling of having control without trying to be in control. The sense of worry about losing control that is typical in many situations of normal life is absent.

The loss of self-consciousness means freedom from negative self-doubt or self-concern. There is total focus and absorption to the point where the performer forgets everything, even the self. This does not mean that someone in Flow has abandoned control over the self. Rather, there is a sense that personal boundaries have been dissolved, and the person experiences a loss of consciousness *of* the self. This can lead to a feeling of self-transcendence and a sense of being part of something greater than the self (Csíkszentmihályi, 1990).

The transformation of time is one of the most common ways of describing optimal experience. During Flow experiences, time appears indistinct and seems to pass by either very quickly or very slowly, although the sensation is of its having passed unnoticed (Jackson, 1996: 77).

An autotelic experience refers to an experience which is enjoyable and intrinsically rewarding simply for the sake of the activity. Autotelic experiences lift activities to a different level of personal enjoyment. However, not all autotelic activities are "good", and one must be "aware of the potentially addictive power of Flow" (Csíkszentmihályi, 1990: 69).

Flow states have been associated with feelings of increased well-being (Howarth, 1993, in Swann et al., 2012: 808), self-concept (Jackson et al., 1998), positive subjective experience and objective performance (Jackson & Roberts, 1992). Swann et al. (2012: 808) state that the intersection of peak performance and peak experience is the crux of Flow, although factors that instigate, maintain, prevent or interrupt Flow are less clearly understood.

2.12.3.2 Flow in music performance

Gabrielsson (2011) writes that achieving Flow in musical performance involves mastering a difficult piece in a fully concentrated yet effortless involvement, a phenomenon often reported by musicians as the happiest moments in their activities. But very little empirical research of performers' peak or Flow experiences exists in current literature, and the nature of emotion in Flow has not been clearly established. Flow is, however, associated with optimal performance, which as a result is associated with feelings of positive emotion and performer well-being. The role of Flow in the performer's emotional experience of a performance will be considered in this study.

2.13 Summary

Existing theories of emotion in general psychology and music psychology have been reviewed in this chapter. Theoretical assumptions of musical emotion, including the distinctions between perceived and induced emotions highlighted by cognitivist and emotivist perspectives, were discussed in depth. The challenges encountered when researchers attempt to measure emotions (musical and non-musical) were presented, as well as the different approaches psychologists adopt in order to understand how emotions (musical and non-musical) are evoked, experienced and expressed. Theories relating to powerful emotional experiences (peak and Flow) were examined, with particular focus on how music evokes these responses.

However, it became evident when researching the existing theories of music and emotion that, although a fairly comprehensive body of knowledge has evolved over the last two decades, these theories relate mainly to the listener's emotional responses to music. Only a handful of studies (reviewed in this chapter) have to date investigated music and emotion from the performer's perspective, resulting in a remarkably scant discourse on this phenomenon. This research therefore sets out to investigate performers' perspectives on their emotional engagement during performance, in order to contribute some empirical evidence to the current literature.

Chapter 3
Methodology

3.1 Introduction

This chapter presents information on the research paradigm and method used for this empirical study. I briefly argue for my choice of methodology and particular preference for Interpretative Phenomenological Analysis. The methods of sampling, data collection and data analysis are presented in detail. The pilot project, which informed the research project, is discussed briefly. Factors regarding the research's ethical procedures are explained, followed by a brief discussion concerning the validity and reliability of the study. A summary concludes the chapter.

3.2 Research design

The research project aimed to explore the subjective experience of emotion in pianists during a solo recital performance. As Willig (2008) asserts, peoples' perceptions and understandings of the same experiences can differ radically. It seemed appropriate therefore to use a qualitative research paradigm based on a phenomenological approach. A phenomenological research paradigm prioritizes individuals' unique perceptions of their experiences, and explores an experience in its own terms (Smith et al., 2009) from the insider's perspective. This method elicited intimate reflections – rather than measurements or comparisons – on emotional experiences during performance from the performers.

Phenomenological research in psychology has two categories: descriptive and interpretative. Descriptive phenomenology focuses on the description of a phenomenon, viewing interpretation as an additional rather than integral part of the research process. Interpretative phenomenology argues rather that description and interpretation of a phenomenon are inseparable (Willig, 2008: 56). It seemed likely that the performers' descriptions and interpretations of their emotional engagement would be strongly interwoven, therefore interpretative phenomenological analysis (IPA), one of several kinds of interpretative phenomenological methodologies, was selected for the study.

Interpretative phenomenological analysis is concerned with the detailed examination of human-lived experience (Smith et al., 2009: 32). It attempts to discover exactly how it feels to experience a phenomenon through qualitative, experiential and psychological research. A

philosophical approach to the psychological study of experience, IPA has theoretical underpinnings from three key areas of the philosophy of knowledge: phenomenology, hermeneutics, and idiography (Smith et al., 2009: 11).

Phenomenology is a philosophical approach to the study of experience. The founding principle of phenomenological research is to examine an experience in the way that it occurs, and in its own terms (Smith et al., 2009: 12). Phenomenologists typically focus on what the experience of being human is like, with particular emphasis on the individual's own comprehension and sense-making of a lived experience. The phenomenological philosopher Husserl argued that in order to identify the essential qualities of an experience, it was necessary to step outside of one's everyday attitude towards an experience and to adopt a disengaged phenomenological approach to the experience (Smith et al., 2009: 14). The phenomenological method thereby offers the researcher a means of viewing an experience through a series of reductionist lenses, each of which offers a different way of thinking or reasoning about the experience. This prevents personal assumptions and preconceptions from distracting the inquirers from focusing on the essence of an experience. In line with the IPA research paradigm, this study prioritizes the process of individual reflection (from both researcher and participants) as its primary method of inquiry. It systematically examines the participants' conscious awareness of the performance experience (Smith et al., 2009: 16), as a means of capturing the essence of the experience.

Hermeneutics is the theory of interpretation concerned with methods and purposes of interpretation, author intentions or meanings, and contextual relationships (Smith et al., 2009). IPA engages a particular aspect of hermeneutics, the hermeneutic circle, which illustrates the dynamic relationship between the part and the whole at any given level. Understanding the whole is dependent on understanding the part, and vice versa (Smith et al., 2009).

Idiography is concerned with the particular, unlike most "nomothetic" psychology which makes claims at a group level. IPA has two levels of commitment to the particular: a sense of detail, acquired through thorough and systemic analysis, and a commitment to understanding how particular people, in a particular context, perceive particular phenomena (Smith et al., 2009: 29). With the aid of in-depth, semi-structured interview questions, this study explored participants' subjective perceptions of their experiences in a flexible yet structured way. The performers were encouraged to elaborate at length on their perceptions of their performance.

This provided a strongly idiographic aspect to the data, which took precedence over general, more objective accounts of their performances. Consequently, the analyses which ensued reflected highly individual and nuanced insights from the performers on the research topic.

3.3 Participants

A small sample of eight performers took part in the research project. There were two groups of participants, one consisting of four student performers and one consisting of four professional performers. The purposeful selection of the performers was directed by the following four main criteria which allowed all the participants to experience the central phenomenon of emotional engagement in performance.

First, the research participants were required to perform a *solo* piano recital. This would ensure that the participants engaged exclusively with the music they were performing, and would not be distracted by musical engagement with other musicians on stage. The performer's experience in an ensemble performance encompasses a number of additional variables which are not part of a solo performance, such as balancing parts, accompanying, or responding to another musician's spontaneity. An ensemble performance therefore could not be considered as presenting the same kind of data that a solo performance would.

Second, the *duration* of the recital should be 60–70 minutes. This should allow performers enough time to settle into their performances, overcome performance anxiety, and begin engaging meaningfully with the music.

Third, the performer's individual performance experiences should be explored within the *context* of a live performance i.e. their responses should relate directly to the specific performance recently completed. All the interviews therefore had to be conducted immediately after completion of the solo recital, with the memories of emotional engagement still fresh in their minds.

Fourth, the performers could be either professional performers or student performers. However, the students needed to be committed to establishing solo careers for themselves, and be as involved with the performance as the professional pianists were. The reason for this was a) to ensure that the research question would have similar *meaning* to all the participants, and b) to discover whether performance *experience* (or maturity) played a role in participants' emotional engagement during performance.

Student performers

The 2011 UNISA National Piano Competition took place in Pretoria during the data collection period. This greatly assisted the recruitment of participants, and the data collection process, for a number of reasons. First, the semi-finalists in the competition were required to perform a 60–70 minute solo recital, which fulfilled two of the research's selection criteria. Second, through the selection process of the competition, the students had a similar level of expertise, and shared the intention of establishing a career for themselves. This met the fourth selection criteria. The competition jury selected six semi-finalists, all of a comparable level of performance expertise, four of whom had agreed prior to the competition to participate in the research project should they reach the semi-final round. In addition, a fifth semi-finalist agreed to participate in the interviews on the night the results were announced. Of these five interviews, however, one interview was not analyzed as the participant was too distressed after her performance to provide a focused interview. Third, the competition ensured that the performance conditions, and thereby the research setting, was consistent for all the performers. Fourth, as all the participants performed on one day, in the same venue, the time and cost factors involved in collecting data were reduced significantly.

Professional performers

The recruitment of professional pianists was more complicated than anticipated. The original plan was to interview South African pianists who had established concert careers in South Africa. This meant that the research would focus on South African performers. But after hand-picking and emailing a small sample of South African pianists, it appeared that only two were scheduled to perform in South Africa during the data collection period. The participant sample was therefore expanded to include international performers.

Several organisers of music societies (randomly selected), the National Arts Festival Committee, and the Stellenbosch International Piano Symposium were approached with regard to solo piano recitals scheduled in 2012. Five internationally acclaimed pianists (including two South African pianists) were scheduled to perform solo recitals in South Africa during the data collection period. Two pianists performed at the 2012 Stellenbosch International Piano Symposium (27-31 March 2012) held at Stellenbosch University, one pianist performed for the Rhodes University Concert Series 2012, one pianist performed for

the Grahamstown Music Society in 2012, and one pianist, who participated in the pilot study, performed at the 2011 National Arts Festival in Grahamstown.

The sample of participants was fairly homogenous with the exception of two significant variables. First, the participants were at different stages of their careers as they were either students or professionals. The decision to include two different kinds of participants (student and professional) was based on the idea that the data may reveal significant insight into how the experiences of emotional engagement develops with maturity and experience. Second, the competition setting applied to the student performers and not to the professional performers. As young performers are expected to perform in competitions before a concert career is established, it is assumed that they are accustomed to the pressure of a competition, and would not be negatively affected by the competitive environment. In addition to acquiring young performers of a similar ilk, an advantage of recruiting competition semi-finalists was that the data might reveal whether a competition setting affects young performers in a significant way (positively or negatively).

3.4 Construction of the questionnaire and interview schedule

The research data was collected in two phases: a brief questionnaire, which was completed by the participants prior to their performances, and an in-depth, semi-structured interview conducted directly after the performance.

Phase 1: The questionnaire

The questionnaire consisted of ten general questions (Addendum A) which were specifically formulated to address a number of criteria:

a) Introduce the participants to key concepts such as musical and non-musical emotions which would be explored in the interviews following the performances.
b) Provide insight into the individual performer's *general* understanding of the concepts prior to the interview, rather than present the participants with concrete definitions during the interview.
c) Create potential interest in the topic before the interview, preventing potential dropout.
d) Stimulate some initial general reflections which could be related to the subsequent performances.

A total of six competition candidates completed and faxed the questionnaire to me prior to their participation in the competition. Four of these candidates proceeded to the semi-final round. In addition to this original group of participants, one semi-finalist completed a questionnaire on the night the semi-finalists were announced.

The five professional pianists each completed the questionnaire and emailed it to me before their performances.

Phase 2: The semi-structured interviews

An in-depth, semi-structured interview was conducted with each participant after they had completed their performances. An interview agenda (Addendum B) consisting of five predetermined, open-ended questions was formulated to capture data relevant to the research topic during the interview. The interview questions were designed to encourage the performers to reflect on specific instances of emotional engagement as well as their overall emotional state during the performance, rather than to discuss their general assumptions of emotional engagement in performance. The main intention of the interview agenda was to encourage the participants to make sense of their emotions during their performances, and to prompt them to elaborate freely on their perspectives.

The interview questions were formulated to allow answers to the research questions to emerge during the analysis, rather than posing the research questions directly. They included four kinds of IPA-specific questions (Willig, 2008):

1) Descriptive, for example *"Did you experience any emotions during your performance today, and if so, can you tell me a bit about them?"* This question was used at the opening of each interview and led to lengthy elaborations on musical and non-musical emotions (Superordinate theme 1).

2) Evaluative, for example *"Was your performance today, in your opinion, emotionally expressive, as described by you in the questionnaire you completed?"* Through referring to their questionnaire answers, this question prompted the participants to apply their general opinions to their performances, and elaborate on their answers. Several performers provided specific examples which supported their questionnaire answers (Superordinate theme 1).

3) Contrasting, for example *"Were you satisfied that you played as expressively as you intended throughout the entire performance?"* This question prompted the performers to identify specific instances of emotional engagement, or the performance as a whole. These explorations led to comparisons between the emotional natures of different pieces, the requirements for emotionally expressive playing, and the state of musical Flow (Superordinate theme 3).

4) Structural, for example *"Obviously there are pieces and/or passages that require more expression than others. During these passages, did you consciously try to feel an emotion when performing them, or were you experiencing an emotion without attempting to induce an emotion?"* This question usually led to a discussion about the degree of performer emotions, and the relationship between the performer and the composer, and the cognitive-emotive aspects of performance (Superordinate theme 2).

The schedule was necessary to prevent the interview from dissolving into informal, general discussion. The flexible nature of the semi-structured interview schedule also helped to establish personal rapport with the participants, in that it prompted detailed explorations of topics as they arose, rather than forcing the participants to adhere to a rigid interview schedule.

3.5 Procedures and data collection strategy

The focus of the study was on the emotional impact – if any – of music on a performer during a performance, and to discover whether this impact played a significant role in the performance. A means of acquiring this kind of "insider" information would be to approach the performers themselves, and to explore their perspectives on their experienced emotions during specific performances. Yet obtaining verbal descriptions of what occurs "inside" a performing musician *from the performer during the performance* is practically impossible, as this would interfere with the performance itself (Gabrielsson, 2011: 222). Interviewing performers directly after the completion of a performance seemed to be the closest alternative to the impossible "live feedback". With their performances as fresh as possible in their memories, I hoped that the proximity of the interview to the performance would be a means to "access" the performers' live experiences to some degree.

Phase 1: Contacting the participants, letter of consent, and questionnaire

Student pianists

After contacting the competition organiser about my research project five months prior to the 2011 UNISA National Piano Competition, permission to approach the sixteen competition participants about the project was granted by the competition organiser (Addendum D). I was supplied with the email addresses by which I could contact the pianists, and permitted to email them directly. The competition organiser authorized me to interview the semi-finalists on condition that a) the participants agree in writing to an interview after their semi-final round prior to the competition, b) the interviews would be confidential, and c) the competitors would not be disturbed before their performances.

The participants were emailed a month before the competition. The email, requesting voluntary participation, included two attachments:

(1) A letter of consent (Addendum C1) which explained the research project, and clarified that participation was limited to semi-finalists due to the research requirement that the performance duration was 60–70 minutes (the earlier rounds were much shorter in duration).

(2) A short questionnaire (Addendum A) which introduced some of the research's key concepts.

If willing to participate in the research project, the performers were asked to sign the letter of consent, complete the questionnaire form, and return both forms to me via email or fax prior to the competition. I received positive responses from six competition participants prior to the competition. However, only four of these six participants proceeded to the semi-final round. At that stage I had planned to interview five student participants, and therefore asked a semi-finalist who had not originally responded to the email if he would consider participating in the research. The participant agreed, and completed the questionnaire and consent form prior to his interview.

Professional pianists

I acquired email addresses for five professional pianists from their respective concert organisers and contacted them individually by email. I emailed all the pianists several weeks prior to their performances. Exactly the same procedure was followed as outlined in the

previous section, with the exception that there was no reference to a competition. The email, which requested the performers' participation, included two attachments:

(1) A letter of consent (Addendum C2) which explained the research project and the requirement that the performance duration should be approximately 60–70 minutes.

(2) A short questionnaire (Addendum A) which introduced some of the research's key concepts.

If willing to participate in the research project, the participants were asked to sign the letter of consent, complete the questionnaire, and return both forms to me via email or fax prior to their performances. All five professional participants emailed the completed documents to me prior to their performances.

Phase 2: The semi-structured, in-depth interviews

Student performers

I attended the UNISA National Piano Competition in Pretoria from 9-16 July 2011 in order to collect the data from the student participants by means of semi-structured interviews. A room backstage was arranged for me to conduct the interviews directly after each performance. This meant that the performers could walk directly off the stage and into the interview session before making any contact with other people, ensuring that the performers' experiences were not influenced in any way by outside perspectives. All five participants were interviewed. However, one participant's interview was not analyzed as she was unable to focus on the interview due to her distress at her performance. Therefore, four student performers provided data for the analysis.

Professional performers

Prior to the research project, one of the five professional performers participated in a pilot study at the National Arts Festival in Grahamstown (see section 3.6). Permission to interview two professional performers after their performances at the Stellenbosch International Piano Symposium was granted by the Symposium organisers. The performers were interviewed in a room backstage directly after their solo performances before they had any contact with audience members. Permission was given from the HOD of the Music Department at Rhodes University, and the Chairman of the Grahamstown Music Society, to interview the other two

pianists after their performances in Grahamstown. Unlike the other interviewees, both pianists were interviewed after they had interacted briefly with audience members after their performances. This was unavoidable due to the circumstances of the concerts, but this short delay did not appear to influence participants' perspectives of their performance.

Conducting the interviews

With the participants' consent, all the interviews were video recorded with a video camera and a laptop (backup video recorder). The durations of the interviews lasted an average of 25 minutes.

I began each interview with Question 1 from the semi-structured interview agenda. Thereafter, I did not follow the order of the predetermined questions, viewing them rather as prompts, and choosing to allow the interviews to take shape according to the participants' responses. I endeavoured to create an interaction with the participants where they could tell their own stories, in their own words (Smith et al., 2009: 57). After hearing the participants' responses, it was often only possible to explore their ideas by asking previously unplanned questions. This meant that I either modified the predetermined questions during the interview, or excluded some of them. Sometimes the predetermined interview questions arose of their own accord. But in general, participants chose to focus on different aspects of their performances in relation to the research questions. The nature of their performance experiences directed these choices, and I was struck by the degree of passion and honesty which fuelled each performer's perspectives of their performance experience.

I referred to each performer's questionnaire responses during the interview, either as a prompt for deeper discussion, or to clarify a particular insight presented in the interview. This provided valuable authenticity to the interview data, as it allowed us to delve deeper into the performers' unique perspectives. As a result, the research data was gratifyingly individual, descriptive, and nuanced. The analysis of the data revealed that while many of the performers' perspectives correlated to produce key themes, highly individual elucidations of their experiences arose quite spontaneously.

3.6 Pilot study

A pilot study was conducted in order to test the effectiveness of the research design. Two participants took part: a student of mine who was not a participant in the UNISA National

Piano Competition, and the professional pianist selected from the group of five professional performers. Both participants performed in the 2011 National Arts Festival held in Grahamstown. The participants therefore represented the student and professional categories of performers selected for the study. Both phases of the research design (questionnaire and semi-structured interview) were tested in the pilot study.

The pilot study was a useful process which revealed a number of issues that led to an improvement of the research project, such as the usefulness of the questionnaire, the interview duration, and my interview technique. The following factors were highlighted in the pilot study:

Phase 1: The questionnaire

During the planning phase it was envisaged that the questionnaire data would be analyzed before the interview data. However, I realised that my original intention to analyse data from the questionnaire was unnecessary for the following reasons:

1. The semi-structured interviews after the pilot performances elicited a wealth of data which related specifically to the performance experience. The questionnaires on the other hand elicited considerably less textured and detailed information which did not shed new light on the research topic.

2. A significant amount of data duplication resulted from the performers' references to (and elaborations on) their questionnaire answers during the interviews.

3. Seeking correlations between questionnaire responses and interview responses was not a priority for this research. If necessary, the questionnaire answers were used as prompts in the interviews, as a means to clarify participants' perspectives or stimulate deeper discussion.

It was therefore decided that the questionnaire data would not be qualitatively analyzed. The questionnaire was nevertheless included in the research project as it 1) gave the participants a good idea of the nature and scope of the research themes which would be explored in the interviews, 2) provided the participants with an opportunity to contemplate some of the research themes prior to the interviews, and 3) established a degree of interest in the research which may have encouraged participants not to drop out of the research before the interviews.

Phase 2: The interview process

When transcribing the interviews, I became aware of the following issues:

1. The first interview far exceeded the planned interview duration (20–25 minutes), lasting 47 minutes. This was a result of losing sight of the research topic, and lapsing into general discussion.
2. I identified a number of moments when I became overly excited about ideas, and inadvertently led the participants (Smith et al., 2009: 67). I also spoke too often, and too lengthily.
3. The interviews consisted of too much dialogue, agreement, and exchange of ideas rather than extended periods of monologue.
4. My own experience as a performer of the phenomenon of emotional engagement during performance occasionally led me to project my opinions on the performer. Fortunately the participants were secure enough in their opinions that this did not appear to influence their descriptions or interpretations of their experiences.

As a result of these realisations, I adjusted my interview technique considerably and learned to stay focused on the research topic, minimize my input in the interview, and stop interrupting the flow of a participant's speech. The pilot study therefore assisted me in refining my interview technique before the research project commenced.

3.7 Data analysis

Transcription process

The IPA analysis framework suggested by Smith et al. (2009: 82-107) was very useful in guiding the analysis process in this research project. Six months after collecting the data from the student pianists, I transcribed the first interview. This was a very time-consuming task, taking six hours to transcribe an interview lasting 25' 07". This was mainly due to my initial decision to transcribe the interview in as much detail as possible, including non-linguistic features of speech (pauses, interruptions, intonation, repetitions, and gestures). At this stage I was undecided as to whether I would use content data analysis only, or whether an additional conversation analysis was preferable. Willig (2008: 27) describes conversation analysis as the "subtleties of communicative interaction between interviewer and interviewee". After analysing the first interview, however, I decided that conversation analysis would not

enhance my data analysis. I therefore chose to transcribe and analyse the next seven interviews using content analysis only.

Data analysis process

The analysis of the data took place in three steps: reading and re-reading the data, initial noting, and developing emerging themes.

Step 1: Reading and re-reading

After transcribing each interview, I immediately proceeded to the analysis of the transcript. An advantage of transcribing the texts without external assistance was that I was thoroughly absorbed in the interview data before commencing the first step of analysis (reading and re-reading the text). I had relived the interview during the transcription process, was immersed in the text, and sensed the same connection with the participant that I had experienced during the interview.

During the re-reading stage I began some initial noting, taking care to take note of any interesting factors which may be particularly relevant to a participant. I also referred back to the notes I had made during the actual interviews. The aim of this step was to become familiar with the text on a very broad, exploratory level, before progressing to the next stage of the analysis. I also identified richer parts of the text so that I had a preliminary idea where the heart of the text lay.

Step 2: Initial noting

The next process involved analysing the text using the three analytical processes recommended by Smith et al. (2009). Each process has a different focus: descriptive, linguistic, and conceptual. The text was therefore analyzed in three stages, each of which focused solely on one of the analytical processes.

1. Descriptive comments focus on describing the content of the participant's perspectives. These notes were made in the right-hand margin, and were completed before proceeding to a linguistic analysis of the text.

2. Linguistic comments focus on exploring the specific use of language by the participant. These notes were indicated in italics in the right-hand margin of the script, and were completed before proceeding to a conceptual analysis of the text.

3. Conceptual comments focus on understanding the text on a more imaginative and conceptual level. These comments were underlined in the right-hand margin, and frequently gave rise to the emerging themes. This was the final stage of the initial noting.

Step 3: Developing emergent themes

The emerging themes reflected the psychological and phenomenological essence of the participants' perspectives in concise phrases. The phrases needed to be both detailed (reflecting participant's original words and thoughts) and conceptual (reflecting my interpretation). I entered the emerging themes in the left-hand column of the transcript box. A challenge of this process was to reduce the volume of data without losing the complexity of the data (interrelationships, connections and patterns between exploratory notes) (Smith et al., 2009: 91). This stage involved working with the initial notes (descriptive, linguistic, and conceptual) rather than the original transcript. While more exhilarating than the earlier stages of analysis, I found this stage of interpreting and organising the data into themes very challenging. The analysis at this stage was no longer participant-led or participant-oriented and allowed me a more central or independent role in the analytical process.

The IPA hermeneutic circle was particularly evident in this stage of the analysis. I would frequently interpret a participant's insights regarding particular moments and experiences of emotion, to the broader concepts of emotion itself, and the performance as a whole.

The above three steps of analysis were repeated with each interview. The transcription and analysis of the interviews lasted approximately two weeks per interview. Analysing the data was by far the most time-consuming, intensive, and challenging component of the research project.

Step 4: Searching for patterns and connections across themes

The themes which had emerged through the analysis were then grouped into main themes. In order to familiarize myself with the emergent themes, I re-read each transcript individually, and then typed each participant's emergent themes chronologically into individual lists. I identified and listed emergent themes at case level (i.e. from each participant) before looking for patterns or connections across the sample. This produced eight lists of emergent themes, one for each participant. The next step involved organizing the emergent themes into subordinate and superordinate themes.

Subordinate themes

Subordinate themes have parallel meanings and represent aspects of the study that are shared by participants within the corpus. To identify subordinate themes, I looked for connections between the emergent themes across the sample of eight lists of emergent themes. Using a method of coding suggested by Smith et al. (2009: 96), I spent some time eyeballing the themes and moving them around to form clusters of related themes. I identified 18 subordinate themes, all of which I included in the next step of developing the larger structure of superordinate themes.

To establish the specificity of each theme, and the extent and frequency it was referred to by the participants, I created a Word file for each of the subordinate themes. I then re-read the transcripts and identified quotes from each transcript which supported the emergent subordinate themes, and listed the supporting quotes from the participants. I identified the quotes using the participants' names and the transcript page numbers. This greatly assisted the later stage of writing the document, as all the quotes and themes were grouped in accessible files.

Superordinate themes

A superordinate theme is an overarching construct which applies to each participant within a corpus but which can be manifest in different ways within the cases (Smith et al., 2009: 166). In order to identify further patterns between emergent themes so that I could group them into superordinate themes, I followed Smith et al.'s (2009) processes of abstraction and numeration.

Abstraction involves grouping similar subordinate themes together to form a superordinate theme. Once again, I spent some time examining the subordinate themes, looking for correlations between them. The eighteen subordinate themes fell fairly easily into three superordinate themes, and there was a clear hierarchy where each superordinate theme had a set of subordinate themes.

Numeration is a process which selects key emergent themes depending on the relative frequency with which a theme is supported across the sample. This is recommended when a study sample is relatively large, resulting in too many subordinate themes. IPA considers three to six samples small, and eight samples to be large (Smith et al., 2009). Themes which

are not referred to frequently enough are discarded. The recurrence of an emergent theme is measured by the researcher, who also decides on the status of recurrence (Smith et al., 2009: 106). I decided to include subordinate themes which were referred to by at least half the participants. This meant that each subordinate theme needed to be referred to by at least four participants in order for it to be included in the study. This reduced the 18 subordinate themes to 11 subordinate themes (Addendum E).

I then compiled a Word file for each of the three superordinate themes. Each file included a) a list of subordinate themes, and b) a list of supporting quotes. I colour coordinated the quotes in the transcripts according to the superordinate themes (theme 1 – green, theme 2 – pink, theme 3 – blue). This facilitated subsequent identification and re-examination of quotes.

Step 5: Write up of the analysis

I began to write the analysis chapter immediately after completing the analysis. Having summarized and condensed the data into Word files of superordinate themes and subordinate themes, the first draft proceeded fairly quickly. I structured the chapter according to the three superordinate themes. Beginning with a brief summary which captured the essence of what I thought the participants were saying, I then addressed each subordinate theme in the sequence I had drawn up in the table of superordinate and subordinate themes. I provided evidence and quotes from each participant to support each subordinate theme (case within theme). If there were conflicting opinions, these were isolated and presented clearly. However, as explained in the section above, not all subordinate themes were discussed by all the participants, and were accordingly not represented in the write-up. Furthermore, certain themes were explored in more depth by some participants than by others. This meant that I prioritized the participant who had revealed more interesting insights, favouring an idiographic presentation of that particular theme (theme within case).

3.8 Ethical considerations

Ethical procedures set out by the University of Pretoria were strictly adhered to. After accepting the invitation to participate in the research project, each participant was asked to sign a letter of informed consent (Addendum C1 and C2). The signed letter of informed consent acknowledged that the participants understood that their participation was voluntary and anonymous, that they could withdraw at any time, and that they would receive no reward for their participation. It also stated that the research data was for academic research purposes

only, and would be stored in the University of Pretoria Music Department for a period of 15 years, in compliance with the ethical guidelines of the university.

3.9 Validity and reliability

In addressing the validity and reliability of qualitative research, Smith et al. (2009) refer to a guide offered by Lucy Yardley. Four main criteria are suggested as important when assessing the validity of an IPA study: sensitivity to context, commitment and rigour, transparency and coherence, and impact and importance of the study. I will explain how these standards were met in my research in the section below.

The first criterion (sensitivity to context) is particularly relevant to my research as I have considerable experience as a performer. Researchers in the field of psychology have articulated the need for musicians (not only psychologists) to research other musicians, arguing that the bridge between psychologist and musician was not well made due to a lack of musical expertise. Although I did not inform the participants of my professional status prior to the interviews, the participants appeared to be aware of this fact, leading to a particular rapport which developed in each interview. My own experience of emotions during performance allowed us to move swiftly from rudimentary descriptive accounts of their emotional engagement during performance (of which I had a professional understanding) to in-depth explorations of their perspectives on the role their emotions played in their performances. Therefore my professional understanding of some of the more intricate aspects of performance enhanced the quality of data collected from the interviews.

I am nevertheless aware that I may have interpretative biases which I may have been unable to remove from my analyses. With this awareness I endeavoured to remove my own opinions to the best of my ability during the processes of data collection and analyses, and aimed to focus objectively on exploring each individual participant's insights. I was not always successful in this aim. For example, after a participant had identified and described his ideal mental state as a "different way of being", I was too hasty in providing the word "zone" to describe his experience. Although he agreed that this was a suitable term, it would have been preferable if he had offered the word himself. My experience of the state of mind he was describing, combined with an unrefined interview technique, may have compromised the data in this instance.

The second criterion (commitment and rigour) was met in that I frequently reassured the participants, particularly the students, that there was no right or wrong answer, and that the focus was on their unique insights. This seemed to put them at ease, and I experienced very good rapport with the performers in all the interviews. Without this excellent rapport, the quality of my data and consequent analyses would have been compromised.

The third criterion (transparency and coherence) was met through the adherence to strict methodological processes implemented in IPA, including presenting tables and diagrams to clarify the procedures I followed with as much transparency as possible.

Finally the impact and importance of the study has been recognized already, as the research was accepted for presentation at the International Conference for Music Perception and Cognition, in Thessaloniki, Greece 2012. The extended abstract was accepted for publication in the conference proceedings.

3.10 Summary

This chapter provides a detailed account of the methodological procedures followed in this empirical research project. The research design was explained, followed by a discussion and motivation for using IPA. The selection of participants, data collection procedures, pilot study, analytic procedures, ethical considerations, and reliability and validity of the study were presented.

Chapter 4
Analysis

4.1 Introduction

This chapter presents an IPA analysis of the transcribed interview data collated from the interviews which directly followed the performances. A priority in the interview process was to encourage the performers to explore and make sense of their emotional engagement with the music they had performed. The data analysis led to the emergence of a set of subordinate themes which were grouped into three superordinate themes. The subordinate themes are discussed in three sections. Each section presents one superordinate theme, the subordinate themes which underpin the superordinate theme, and extracts from the transcripts which support the subordinate themes. A short summary concludes the chapter.

4.2 Identifying superordinate and subordinate themes

Three superordinate themes and eleven subordinate themes emerged from the interview data. Table 4.1 presents the master table of superordinate themes and subordinate themes, and includes raw data consisting of selected quotes from the transcripts. A more extensive representation of this table can be found in Addendum F. The first superordinate theme focuses on the performers' experienced emotions during their performances, and explores six subordinate themes. The second superordinate theme focuses on performance as an embodied cognitive, emotive, and sensory motor experience, and addresses three subordinate themes. The third superordinate theme focuses on optimal performance experiences which the performers experienced during their performances, and discusses two subordinate themes.

Table 4.1: Superordinate and subordinate themes, raw data and keywords

Superordinate theme 1: Performers' experienced emotions during performance		
Subordinate theme	**Raw data**	**Keywords**
1. Musical versus everyday emotion	Pianist A: In my daily life I feel emotions quite strongly depending on the situation, but in the music, it's a whole different way of being. (p.17) Pianist E: I think it's just like you're watching yourself in the mirror, and the mirror is a little opaque. It's not a complete one to one … a copy of reality. (p.15)	different way of being not reality
2. Perceived versus induced emotion in performance	Pianist C: So even if you are not feeling the emotions, like I did not today, I know what to do to get that effect out. (p.12) Pianist E: Do I feel death and pain …? I don't know that the emotions that I am experiencing are that defined. (p.14)	not feeling emotions not defined
3. Prior experience of perceived musical emotion	Pianist E: The emotions that came today are not foreign or strange to me, they're not new. I didn't practise the emotions, I have experienced them before. (p.3) Pianist F: The emotion is already there in an embryonic state, and then when you play, your own sound enhances it and makes it come to life. (p.3)	not new embryonic state
4. Performance-related emotions	Pianist A: Nervousness and anxiety tend to ruin your performance, and your ability to participate in the music. (p.10) Pianist B: It felt very insecure, and the whole time I tried to re-engage myself, re-engage	ruin performance insecure, unable to re-

	with the music, and to try and *say* what I want to say, but the whole time, I felt like I wasn't *able* to. (p.4)	engage
5. Emotional control	Pianist C: But it (performance-related emotion) also made me, especially in the third movement, miss notes, and lose control … from playing too fast. (p.7) Pianist D: If the (musical) emotion gets the upper hand above thinking and reasoning, it's likely to end disastrous. (p.3)	lose control disastrous
6. Other aspects of expressive performance	Pianist E: Music can express … many other things – intellect, and mathematical kind of qualities, and architecture, and order, and symmetry. (p.16) Pianist G: You're creating electricity and excitement but, even when I'm trying to shape a phrase and be musical and make it speak, I wouldn't say it's an emotional thing. (p.6)	express other things create electricity, excitement
Superordinate theme 2: Performance as an embodied cognitive, emotive, and motor experience		
Subordinate theme	**Raw data**	**Keywords**
1. Performer–composer relationship	Pianist B: It's the marriage of the two. (p.9) Pianist G: I find it such an interesting challenge to bring a bit of your own spin to what the composer has dictated. (p.16)	marriage own spin composer dictated
2. Cognitive–emotive duality	Pianist E: There is some kind of a dual personality when you play. (p.4) Pianist F: It's a controlled schizophrenia because your brain basically splits into two	dual personality controlled schizophrenia

	different parts. (p.2)	brain splits
3. Embodied performance	Pianist F: Passionate moments in a piece of music that … can make you feel almost like *hugging* the piano. (p.4) Pianist H: It's this *embrace* that you can do here, and it feels like your whole body's just ready to be part of the piano. (p.16)	passionate moments hugging the piano embrace part of the piano

Superordinate theme 3: Optimal performance experiences		
Subordinate themes	**Raw data**	**Keywords**
1. Defining the zone	Pianist A: Everything comes on its own, it flows. (p.17) Pianist F: It's totally absorbing, one hundred percent. (p.12) Pianist G: It's like you're in another state of mind, on another planet. (p.7) Pianist H: It's the space where the music exists as an entity in its own right. (p.6)	everything flows totally absorbing another state of mind, another planet entity in its own right
2. Factors influencing the zone	Pianist D: You have to *get into* the zone, a piece doesn't always necessarily *start* in the zone. (p.21) Pianist G: I have developed the skill of being able to consciously enter the zone. (p.12)	get into zone skill consciously enter

4.2.1 Superordinate theme 1: Performers' experienced emotions during performance

The analysis revealed that the performers experienced two distinct categories of emotions during their performances: musical emotions which related to the music, and performance related emotions which did not relate to the music. Both categories of emotions were linked to a third category of emotions, their everyday experiences of emotion, to some degree. These categories of emotions are addressed in six subordinate themes: musical versus everyday emotion, perceived versus induced emotions, prior experience of musical emotion, performance-related emotions, controlling musical and performance-related emotions, and other aspects of expressive performance.

Subordinate theme 1: Musical emotions versus everyday emotions

The performers made a clear distinction between their experiences of musical emotions and everyday emotions. When reflecting on their performances, the performers either identified specific instances, or extended periods, when they experienced musical emotions in direct response to the music. However, when comparing their experience of these emotions in a performance context with an everyday context, they described the musical emotion as significantly less powerful and less direct than an everyday emotion.

> Pianist A: I also found that, maybe in my daily life I feel emotions quite strongly depending on the situation, but in the music it's a whole different way of being. (p.17)

> Pianist G: I think in general it *is* different from my everyday experiences because um, *because* of that prevailing sense of ecstasy, because I so enjoy what I'm doing … so much that even when the music is extremely painful, or extremely angry, I can't *possibly* compare it to the pain that I feel when I've had relationships break up … or lost a pet … or whatever. There is no way. I know my emotions are so much more heightened in those non-musical situations. (p.21)

Aside from the difference in intensity between musical and everyday emotions, the performers also seemed reluctant to define their musical emotions in the same terms as everyday emotions. According to the performers, musical emotions are experienced in a more abstract manner than everyday emotions, therefore comparisons with everyday emotions do not adequately describe the experience of musical emotions, as they reduce the emotional character and complexity of the experience.

Pianist E: I don't know if it's something that you can really experience one to one with the pain that you have had in your life, or the joy, or happiness. I don't know if I give the emotions that I am experiencing these kinds of definitions – of sadness, happiness, tragedy, love or hate. I don't know if it's … anything like that specific. I think it's just like you're, you know, watching yourself in the mirror, and the mirror is a little opaque. It's not a complete one to one … a a a copy of … of reality. (p.14-15)

Pianist H: I feel lots of things but it's not anything that I can name in that tangible sad, happy etc. way … feeling *moved* in some way … because that for me is another definition of emotion … that's my personal one. (p.2-3)

Thus, the analysis suggests that while performers do experience musical emotions in a performance context, the intensity, directness, and scope of these emotions differ significantly from similar emotions experienced in an everyday context. Musical emotions appear to be more complex, nuanced, and less defined than everyday emotion. The next subordinate theme explores the nature of the performers' emotional engagement experienced during performance in more depth.

Subordinate theme 2: Perceived versus induced musical emotions in performance

In this section, the relationship between perceived musical emotions (the recognition of an emotion) and induced musical emotions (an actual feeling) within a performance context is explored. It was evident that the performers had given a lot of thought to the composers' possible intentions and emotions during their concert preparations. Their perceptions of these intentions and emotions appeared to direct much of their musical interpretations, which were communicated during performance. It was clear that some of the performers also experienced actual emotions (induced emotions) in response to the music during this stage. However, they did not necessarily base their interpretation on these induced emotions.

Pianist A: I try to, when I study a work, to see … we can never know what the composer's real emotions were, we know what he wrote down. I try to understand the music, in different aspects um, not just basing my interpretation on an emotion that I feel when I listen, it's just a direct emotion. But I try to *channel* the emotion into a bigger structure where I know that this work is written, the harmony is this or that. (p.15)

The performers were able to identify specific musical emotions (perceived emotions) in the score which they intended to communicate during the performance. However, when asked

whether they experienced these musical emotions themselves during the performance (induced emotions), there were some differences between the performers. Six participants identified specific examples of perceived emotions they were portraying, but did not feel that these emotions necessarily correlated precisely with their emotional experiences when performing the perceived emotion. For example, Pianist A identified two musical emotions – aggression and madness – which he perceived to be in *Scarbo* by Ravel, but clarified that the correlating emotions he felt at these points reflected only a partial induction of the emotion:

> Pianist A: The aggression I felt playing is not ah, is not the normal aggressive emotion that I felt that tends to overtake you, that tends to want to drown you. In a smaller way I feel the emotions, but it's more indirect. It's more *through* the music I participate, but I'm not really feeling the emotions in my normal mind. (p.6)

Furthermore, he identified another perceived musical emotion – desperation – at a later point in the same work, but did not experience any form of the emotion during his performance:

> Pianist A: So there is … in some parts there is a human cry for help. But … I'm not sure if I really felt that today. (p.5)

This implies that the musical emotions were perceived and communicated but not induced in the performer. Similarly, Pianist D articulated how he intentionally distances himself from the perceived emotion which he is communicating to the audience, and engages only partially with the emotion.

> Pianist D: Well I don't think one experiences the emotion as such. I think you remove yourself … But the thing is what I think makes an exceptional performance from a good performance is when you engage emotionally in your work *to a certain extent.* (p.3)

Composers are able to express a wide range of strong and contrasting emotions within one piece, as the time frame for composing a work is generally not restricted. The performer, on the other hand, has to try to communicate all the composer's intentions, in a relatively short time frame during performance. Performers approach the expression of contrasting emotions in different ways. Pianist D consciously suppresses his emotions in order to express contrasting perceived emotions which rapidly succeed each other. This suggests that he expresses only perceived emotions in performance.

Pianist D: Look the composers are very good as well, so they lead you on. So what I try to do, I neutralize. … Because once the piece is finished, then that emotion is … you lock the door there. But you have to open the new one. (p.17)

A substantial extract from Pianist E's transcript has been included in this section as it displays how, through delving deeply into his recollection of his performance, his emotional awareness develops dramatically. At first, he describes his emotional engagement during the performance as an "instinctive" response to the perceived musical emotions. He initially considers his induced and perceived emotions to be inseparable.

Pianist E: Well I I I don't really do any distinction between the emotions that I have experienced in the moment of performance, and what I think, or perceive, to be the emotions that are appropriate, based on the interpretation or based on my knowledge of … intellectual knowledge or analysis of … the pieces that I played. Um … I trust my instinctive emotions. (p.2)

He highlights the role life experience plays in a musician's perception and interpretation of musical emotions. He proposes that the expression of his emotions, through his musical choices, in performance therefore offers a unique, intimate portrayal of himself. At this point, he still argues that specific musical emotions are always induced in him during performance:

Pianist E: Whatever the music calls for, whatever I am creating in the moment, *invokes* certain emotions, and I think the more I am um, getting carried away into the music I am creating, whether it is in the practice room, or on stage, the more … genuine those emotions are. And I know that they are genuine because it *feels* very natural and very real, it's not manufactured in a sense, it's kind of an extension of the performance of some sort. (p.3)

Furthermore, he argues that it is impossible for him to be emotionally unaffected when performing emotional music.

Pianist E: The programme I played today is a very emotional programme … *Moonlight sonata, Waldstein* and Chopin *Sonata No. 2, Funeral March* … but for me to just *sit* there and not be *affected* by that programme, is an impossibility. (p.5)

However, as the interview progresses, he clarifies that he did not experience the specific perceived musical emotions – death and pain – that he wished to communicate. Rather, his own emotional experiences reflect a less defined emotional arousal. He then begins to deliberate whether an induced specific emotion is even possible.

Pianist E: You know I played *March Funerailles* … Funeral March yes, and that's the famous third movement. Do I feel death and pain and all that, and if I don't then what's wrong with me and how can I do that right? Um … I don't know that the emotions that I am experiencing are *that* defined. I don't know if I see the moonlight in my eyes when I play the opening of the first movement of Beethoven. I don't know if it's something that you can really experience one to one with the pain that you have had in your life or the joy or happiness. It is I think perhaps for me this interpretation of emotions in music is very literal *too* literal. It's too direct. (p.14)

It appears that Pianist E experienced heightened emotional arousal during the performance, but did not actually experience the perceived emotion he was communicating. Rather he represented his perceptions of the musical emotions, which were encoded in his interpretation of the music's structural cues. The emotional arousal he nevertheless claims to experience is therefore unrelated to the perceived musical emotions.

Similarly, Pianist F relates experiencing feelings of intense emotions throughout his performance, but does not mention experiencing the specific musical emotions perceived in the score. Instead, he focused on the task of communicating perceived emotions to the audience, a process which he describes as being enhanced by his aroused emotional state during the performance.

Pianist F: I think I was taken um, to a state, an emotional state that remained during the performance, and the intensity of which peaked and then, ah, maybe receded a little bit – according to the music – but I cannot think of one single moment during a performance, or being onstage, here I don't try to be a beacon, ah, or … a medium … to *reach* the audience and ah so yes I was emotional the whole time (p.2).

Pianist G identifies experiencing heightened emotions when performing compositions by Romantic composers rather than Classical composers. This implies that emotional engagement may be affected by specific style periods in addition to perceived emotions.

Pianist G: There is a bit … a lack of emotion (in Haydn) as I would associate with Liszt or with Moszkowski or Albéniz … all the things on the second half. I would categorize them more as emotional pieces, where I experience much more heightened emotions than just the sort of happiness and lightness of the Haydn. It's much more heightened and … connected. (p.3)

He later describes a specific instance of performing what he perceives to be "negative" musical emotions. He clarifies that he did not experience this emotion during the

performance, but is nevertheless satisfied that he expresses the music's perceived emotion. The piece's structural cues communicate the perceived emotion.

Pianist G: One piece that comes to mind is the *West Wind* in the Debussy … it's very angry, very agitated, so there's never a point where I find myself going aaaaah … where I'm enjoying the sounds that I'm producing, I'm focusing much more on creating excitement and creating electricity in the sound, I'm definitely trying to drum up emotions through the sound but it's not ecstasy. (p.5)

Pianist H describes feelings of heightened emotional arousal during performance, but elaborates that her arousal is not in response to specific instances of perceived emotions in the music. Rather she responds firstly to the sound of the piano itself, and secondly to the harmonic progression in the music. She clearly differentiates these personal sources of arousal from the musical emotions she perceives to be in the score. She also describes how she sometimes visualises an image in response to the music, which then triggers her emotional response.

Pianist H: Or sometimes I want to be thrilled, whatever those chords are … the older I get … I think because my ear has become such a major kind of … driver. … And sometimes I'll … because I'm quite a visual person um … sometimes I'll imagine an image … there are African churches on the koppie and sometimes you hear it and you think aah I'm going to cry it's so beautiful, and then I think remember that feeling? (p.21)

Two student pianists claimed that they experienced instances of perceived musical emotions during their performances. Unlike the other six participants in the study, these pianists were very dissatisfied with their performances, and were distressed during their interviews. The analysis suggests, however, that their induced musical emotions were actually a transference (or reflection) of the distressed moods which had permeated their performances.

Pianist B describes experiencing pain and joy, two of the musical emotions he perceived in the Bach *Partita in C minor*.

Pianist B: The Bach (*C minor partita*) for me is about pain … but there's also denial in it, and denial of the pain, and then also moments of joy but always this underlying sense of … something terrible happened.

CF: Ok, so you identified in the preparation with those, and then on stage, did you feel pain?

Pianist B: I did yes, I did yes yes yes.

CF: And the joy as well?

Pianist B: Yes absolutely, absolutely. (p.6)

The remainder of his transcript however does not support his feelings of joy. The underlying sense of disaster he refers to could very likely reflect his own view of his performance, which he repeatedly describes as disastrous.

Pianist C identified tenderness (2nd mvt) and depression (4th mvt) in the Brahms *Sonata No. 3*. His angry, frustrated mood however prevented him from experiencing one perceived musical emotion (tenderness), but did not interfere with the other (depression). This suggests that musical emotions can be overpowered by strong everyday emotions (anger). Furthermore, it is likely that the perceived musical emotion (depression) he experienced represented his actual mood, rather than a musically induced emotion. As he stated, the emotion already existed, and was not induced by the music.

Pianist C: And today for example in the Brahms, the second movement has a little poem with it about … it's two lovers standing in the moonlight. But I was struggling to bring that tenderness across, because usually I would want to feel, that tenderness … bring it across, but I struggled with it. Where in the fourth movement, which is sort of the morbid, the "rueckblick" (reflective) movement, I had a good time getting that depressing, dark feeling, because I was feeling that already. (p.9)

However, he later supports Pianist G's statement that he could express the emotion without feeling it:

Pianist C: So even if you are not feeling the emotions, like I did not today … one did not feel all the emotions I wanted to … I know what to do to get that effect out.(p.12)

With a few exceptions, it appeared that specific perceived emotions encoded in the musical score were not specifically induced in the performers during their performances. Even when recollecting their possible engagement with a specific perceived emotion, the performers described their overall emotional engagement in more general terms, such as a heightened state of emotional arousal. The performers could easily identify perceived musical emotions which they had encoded in their interpretations in earlier preparation stages. But the perceived emotions did not necessarily induce the same emotion in the performers during performance. The perceived musical emotions were seen as an integrated part of the musical performance, rather than representative of the performer's emotional state.

Subordinate theme 3: Prior experience of musical emotions

Almost all the performers stated that, because they had already engaged emotionally with the music during preparation stages, any specific musical emotions they may experience during performance were familiar and unspontaneous. They anticipated their emotional responses to the music before they played the music (due to the performance preparation), and seldom experienced a new musical emotion during performance.

The student performers emphasized the importance of identifying perceived musical emotions, and responding to them, when practising a work. Both perceived and their induced musical emotions would then be integrated into their interpretation of the score. During the performance, these musical emotions would be communicated to the listener through the interpretation, but may also be accessed by the performer.

Pianist B: When I prepare I think … this is what I think this is about. And then when I let it happen during performance, it's sort of … a reaction rather than … putting it into it. I don't think … ok now here goes pain, it's sort of … yeees that's what it is. (p.13)

Pianist C: You need to prepare … it (musical emotion) is kind of already practised in. So even if I'm not completely feeling it, I can still give the idea that I am feeling it 'cause I know how it's supposed to sound like. (p.12)

Pianist D: You take the essence of the emotion, and you identify those essences while practising and rehearsing … and then when it comes to performance, you are able to put it in there. (p.3)

The professional pianists described a similar process of emotional engagement when practising a work. However they emphasized that their musical emotions are *experienced* prior to the performance, rather than "practised in".

Pianist E: Yes, but that (musical emotion in performance) doesn't happen out of the blue … I obviously had practised what I played today, and I played it … in the practice room, and also in … rehearse it on stages. If you want to call it rehearsal … I've performed it before. So the emotions that came today are not foreign or strange to me, they're not new, no.

CF: Ok so they are … they have been practised in and you have identified …

Pianist E: Well I didn't practise the emotions. I have *experienced* them before. (p.3)

Pianists F and H offered an intriguing notion of cognitively "storing" musical emotions prior to a performance. Once experienced, the perceived musical emotion is stored in an embryonic form. It can then be musically recreated in various ways in different performance of the same

work. This, Pianist F explained, accounted for the phenomenon that his repeat performances are never identical experiences.

> Pianist F: The emotions are triggered also by the music that you yourself play, but the concentration and intellectual part of the brain, where all the information is stored about what you are doing, the notes, and the gestures, and the movements, and the emotions that those harmonies and notes trigger – even before you hear them, they are all stored in your mind, because you have already *experienced* it many times in preparation, you've played the music many times so you know what kind of emotion it's going to elicit from you. That's not to say that everything is calculated and it's already happened, and it's going to happen in the same exact way, it can change every time, and it *should*. The emotion is already there, in an embryonic state and then when you play, your own sound enhances it and makes it come to life. (p.3)

> Pianist H: Maybe it (musical emotion) falls away … maybe it becomes so sort of compressed, because you know ... I'll look at the first note on the page and then I think – oh I know how it's going to go – and it's that sort of instantaneous thing, from head to keyboard … so you know what the sound's going to do, but at the same time … simultaneously you're delighted by it, or … moved by it. (p.10)

Pianist E claimed that his musical emotions play an integral role during a number of preparation stages, such as initial hearing of the piece, learning the notes, forming an interpretation, memorizing the score. During each stage of preparation, he experiences, and manages, his perceived and induced musical emotions differently. This process influences the emotional development of the piece he is preparing. The cumulative result of all the stages of preparation is then presented in the performance. This implies that the performer's engagement with a musical emotion, leading up to and including a performance, is significantly more complex than an induced emotional response on first hearing of a piece of music.

> Pianist E: When you start to learn a piece … any kind of music … to go through these stages, then you also start to understand the emotional *capacity* of it, and how you react to it. And on the same token you start to understand … to deal with … controlling as well – not to be carried away completely – and to maintain some kind of integrity to the text itself. (p.8)

Pianist E proposed two factors which may account for why he is less affected by a performance than the listener. Firstly, he had already engaged emotionally with the music on

multiple occasions throughout the preparation period. This repeated exposure to the music reduced the impact of the music on him.

> Pianist E: And then you know music speaks. It really does speak. It speaks to me a lot when I play, throughout my preparation of this recital, for *months*, and for *years* actually, that I play and practise, and so it speaks to me. But for the audience, some of them experience it … maybe for the first time, maybe for the tenth time … I mean, they don't know the music as much as I know it. And so there is that fresh effect … that shock effect. (p.16)

Secondly, he is working hard to create the performance. This active role in the performance – unlike the listener's passive role – prevents him from abandoning himself to the experience of powerful musical emotions.

> Pianist E: And also, they experience it completely free of the burden of performing it. They just get the music, the *pure* essence of it, so it *has* to make a bigger effect on them. (p.16)

In sum, the performers did not experience new musical emotions in performance as they had identified perceived musical emotions, engaged with them, and integrated their emotional responses into their interpretations prior to performance. Their interpretations of the musical emotions are therefore a representation of the perceived musical emotion as well as their own induced emotions.

Subordinate theme 4: Performance-related emotions

The performers reported experiencing other kinds of emotions which were not related to the music during performance. These non-musical emotions resembled everyday emotions, but were triggered by specific events or circumstances during performance, such as an unresponsive piano, extreme performance temperatures, unpleasant performance circumstances, or distracting audience. However, unlike everyday emotions which incorporate the whole spectrum of positive and negative human emotions, the participants described their performance-related emotions as predominantly negative and destructive to their performances. They appeared to be strong emotions which were clearly identifiable, and experienced directly, for example performance anxiety, self-doubt, dissatisfaction, frustration, and anger. Unlike musical emotions, which were described as predictable and anticipated, performance-related non-musical emotions could occur randomly and spontaneously. They were not experienced in isolation and frequently occurred concurrently with musical emotions.

Impact of performance-related emotions on performers

Although different to musical emotions, performance-related emotions were not entirely independent of them. Performance-related emotions generally impacted negatively on the performers' ability to fully engage with the music. This did not necessarily affect the expression of the musical emotions as, when contending with performance-related emotions, the performers were able to rely on practised musical cues to express the perceived emotions. However, they felt that contending with the emotions distracted them from their musical intentions, and that their performance experience was compromised. Not a single example of a positive performance-related emotion was offered, illustrating that the performers did not experience them as constructive or positive. As Pianist A remarks:

Pianist A: Nervousness and anxiety tend to ruin your performance, and your ability to participate in the music. (p.10)

At this point in the analysis it became clear that the impact of performance-related emotions on performances affected the more experienced professional pianists and the student performers differently. This was mostly attributed to professional experience in dealing with difficult performance circumstances. However, it must be noted that the students had to contend with performing in a competition, which added an extra variable to their performance experiences. Therefore the analysis of performance-related emotions is presented in two subsections: a) student responses (general and in relation to the competition) and b) professional responses.

a) Student performers' responses to performance-related emotions

The student performers in general appeared to be more affected by performance-related emotions than the professional performers. Two student pianists, describing their performances as disastrous due to negative circumstances, expressed experiencing enormous frustration at their subsequent inability to express the perceived musical emotions due to these circumstances. They described how their performance-related emotion (frustration) inhibited their musical engagement and expression. Furthermore, they did not enjoy their performances as they were unable to distance themselves from the powerful negative emotions they were experiencing.

Pianist B: Very insecure … it felt very insecure … and the whole time I tried to re-engage myself, re-engage with the music, and to try and express what I … *say* what I want to say … but the

whole time, I felt like I wasn't *able* to, and I just wanted to get *off* stage … it was *definitely* not an enjoyable experience. (p.4)

Pianist C: The Haydn … I think of it as kind of … orchestral, so you sort of have all these different effects, almost operatic, you can have the minor sections a bit like over the top … and more drama, and then for the fast movements, usually I think of control and things like that … but if you have these negative emotions impacting you, it distracts you. (p.3)

Effect of the competition on student performers

The analysis found that the competitive element in the student participants' performances affected two of the students. Two performers (Pianist A and Pianist D) were hardly affected, while two performers (Pianist B and Pianist C) were significantly affected by the competition circumstances. However, all the pianists expressed that although their personal enjoyment of the performance was compromised by the competition, it did not detract from their ability to perform to the best of their ability.

Pianist B suffered from extreme feelings of low confidence as a result of very unusual competition circumstances. He was eliminated before reaching the semi-final round, only to be reinstated after another candidate withdrew before the semi-final round commenced. This irregular competition circumstance unsettled him so much that he could not shake a powerful feeling of inferiority to the other competitors. Despite his concerted attempts to overcome this feeling, it did not subside throughout the performance and he could not engage emotionally with the music.

Pianist B: That whole scenario really affected my emotions today um, I was, I was a little frantic about it … in the sense of … you know, knowing, knowing that I, you know, I had to play … and um, actually this this round was the music that I was the least worried about and um ... and I I I really think that the whole sort of the hype and the … energy surrounding the the um … you know replacement … negatively affected me today, it completely unsettled me, even on stage you know, I really felt … very very insecure … because I I think you … you deal with not being let through to the next round, and then all of a sudden that was changed, and so it just completely messed up the whole cycle of preparation … mental preparation and emotional preparation. (p.2-3)

The stuttering and repetitions in the verbatim transcript illustrate how flustered Pianist B still was during the interview. Interestingly, he revealed that his feeling of inferiority was caused more by his fear of how the audience, as opposed to the jury, might judge him.

CF: Did you have a sense of – an awareness of – being judged by the competition? Did that put extra pressure on you?

Pianist B: It did not, it did not. I tried to I tried to be um … to disconnect myself from that. It was it was more sort of a a … you know, it was at the beginning in public and feeling vulnerable ... you know, and um I tried to make the best of it …

CF: Did the response from the audience affect you positively or negatively?

Pianist B: I did feel … I felt, I felt judged. (p.14)

Pianist C was overwhelmed by negative performance-related emotions after an audience distraction caused him to have a memory slip. This immediately triggered a fear that he would be eliminated from the competition. His fear of failure in turn triggered strong feelings of frustration and anger which did not subside throughout the performance.

Pianist C: Well I did feel a lot of emotion … a lot of personal emotions, and I think it was kind of overshadowed in this specific performance, because right at the beginning of the Haydn, I was distracted by a woman coughing, and then I lost my place, and then when I retook it I realised I skipped about a page of the Haydn, and immediately I probably blushed blood red on the stage and just like frustration came over me. Yeah and then … basically that distracted me the entire rest of the performance because I kind of knew it was over right then … 'cause there's no way the judges couldn't pick up on that … I was angry at myself, and the woman of course, and I was just … frustration was the biggest emotion. (p.2)

The analysis found that this candidate was highly ambitious, and strongly motivated to succeed in the competition. It is important to note that it was his fear of failure, not the competition itself, which distracted him. It is possible that it was this attitude which led him to disengage from the music, rather than the competition.

Pianists A and D described the competition pressure as adding only a slight increase in pressure, and was easily manageable. Pianist A felt the scope of the competition possibly inhibited his musical emotions to a degree, but otherwise described his performance experience as uncompromised by the competition pressure.

Pianist A: Because I was a bit nervous as well. And it's the first time I play … in a competition this big, so there are a lot of different factors … that influence the emotional side. (p.5)

Pianist D described feeling affected by the competition pressure before he played, but not during the performance. He described feeling frustrated and angry after playing inaccurately, as errors could eliminate him from the competition. However, he dealt with these negative emotions in the same way as he would in other circumstances. His focus was on recovering swiftly and performing the music well, rather than succeeding in the competition.

> Pianist D: But I think what makes a good musician is to oppress that [feeling of frustration or anger] immediately. Because what I normally do if something should happen and you have a … you will always hit wrong notes, it's just one of those things, and to be able to deal with that is just as important as hitting the right one. So it's the ability to think … ok I hit the wrong note, now I might be out of the compe … because I mean this happens in split seconds … it takes you what … zero seconds to think I'm out of the competition. The next thing is you must be able to go on, it doesn't help if you fall flat and say, ok I've had it now. So the immediate thing is, other people have done it as well, you can go on just go, it's how you end not how you play in the middle part, just go for it. (p.13)

In sum, the negative competition circumstances (Pianist B) and perceived thwarted ambition (Pianist C) prevented two of the student performers from enjoying their performances, but did not affect their performance in any other discernable way. The other two student performers were not affected in any discernible way.

b) Professional performers' responses to performance-related emotions

Generally less affected by non-musical emotions, two of the professional pianists did not refer to experiencing them at all. As it is unlikely that professional performers do not experience any performance-related emotions, this suggests that, with experience, performers learn how to successfully manage any negative performance-related emotions so that they cease to play a significant role in performance.

Pianist F provided some interesting insights into how a performer can consciously override negative performance-related emotions with positive musical emotions. He was extremely dissatisfied with the piano's inferior tonal capacity. This led to feelings of frustration because he felt that his musical and technical standards were being compromised. As a result of technically manipulating his sound production throughout the performance, a mechanical task he usually completed prior to performance, he became tense and physically exhausted.

Pianist F: There were disturbing factors. First of all, the piano – which is a decent instrument, but it has very severe limitations in terms of sound, and harmonics, and richness of timbre variety. And it has a very subdued treble section, where you would want more of a projection in the sound, and it was unbalanced because the bass was more powerful, so that I had to rebalance everything physically. Um … and it affected me in the sense that it made me more *physically* tired because I wasn't relaxed, and I wasn't relying on muscle memory so much for some of the physical technical things that I normally do. And I had to squeeze blood from a rock from this piano to get a really lyrical sound, a really, really good cantabile sound. (p.6)

Despite his compromised technical circumstances, he managed to sustain emotional engagement. To counteract the negative emotions (frustration), he accessed and focused on the perceived musical emotions. This improved his mood even though the quality of his experience was compromised by technical strain.

Pianist F: Actually, I relied on emotions, focusing more on them to forget, while I was executing all those changes that I'm talking about, but to forget about how upsetting it would be. Because then I don't want to be in an upset mood when I play, because then I don't enjoy the music. I just … I reached the state of mind where I thought I will do what I can with the piano physically, I know what I need to do, but I'll focus mostly on the musical side, and the emotional side and then … come what may. (p.7)

Pianist H described how she counteracts negative emotions by focusing on body awareness, breathing, and aural aspects of her performance.

Pianist H: The more experience one gets, the more you learn to let those things go. But there are just some days where it's hard to settle down … and then that's when I find I resort to things like physical stuff … breathing being the big one, and sometimes I'll sit on my bum, or I'll move on the chair, or I'll remind myself of the feeling in my arms, between the shoulder blades, that magic space etc., and this sort of wideness across here [indicates chest and spreads out arms]. That's if things are really difficult. But the other one is then, listen to the sound. Always listen to the sound because that then pulls you back into that space. (p.12)

The analysis shows that performance experience teaches performers how to manage negative performance-related emotions, through diverting attention to positive musical emotions, breathing, or listening attentively. Furthermore, a performer's maturity and musical motivation appear to play an important role in managing potentially destructive, performance-related emotions.

Subordinate theme 5: Emotional control

The performers cautioned against excessive emotional engagement with *both* musical and non-musical emotions during performance. As Pianist B illustrates, uncontrolled emotional engagement can disrupt the performer's concentration, which leads to error.

> Pianist B: I can say from today, you know, I felt completely overwhelmed by non-musical emotion. And also when I get carried away in musical emotion, I tend to … it snaps me out because it distracts me. So I think it it's good to have that in your preparation but not when you approach a passage. Or when you start a piece to think … maybe *before* you start, but not while you're playing. I don't think it's good to think … or to have it *dominate.* (p.12)

The kinds of errors experienced by the performers as a result of overwhelming *musical* emotions included technical (wrong notes), musical (rushing), or stylistic (undetailed) errors.

> Pianist A: There's a part of me that participates in the music emotionally, but there's another part that has to remain concentrated and keep everything together. So I can't really let myself go with the emotions. I sort of feel them but um, it's like a different part of me. But I must be careful because otherwise if you let yourself too … go too much with the enthusiasm, you can start making mistakes, and then the whole thing collapses. (p.3)

> Pianist C: Yes I do think there is a stage where sort of you're controlling … your technique has to kick in so that your emotions don't run away with you. Because you could … I mean, it could have a detrimental effect if you were so passionate, I think if you lose control over your emotions, then you can lose control over the score, and what the score says, and also your technique can fall to bits. (p.11)

> Pianist D: With emotion, there's always a certain extent to which it must interfere. If the emotion gets the upper hand above thinking and reasoning and … because it's an active thing, performing, um, if that gets the upper hand, it's likely to end disastrous because you'll get carried away, you'll forget … then the music, you forget the composer as a whole and the time period and you become … it just becomes relevant on you. And it becomes such a *personal* thing that it's likely to have wrong notes in it. (p.3-4)

Pianist C observed that his technical and musical control was compromised as a result of being overwhelmed by strong *performance-related* emotions (insecurity and hysteria). He rushed, missed notes, and felt he lost control of the performance.

Pianist C: I was a bit insecure, I was a bit hysterical at stages and … it also made me, especially in the third movement, made me like miss notes, and lose control and things like that, from playing too fast. (p.7)

Aside from causing performance errors, overpowering emotions could prevent the performer from accurately representing the score. Pianist E strongly disapproved of what he described as a highly self-indulgent performance.

Pianist E: Yes, and then you you're not performing Chopin or Beethoven. You perform *yourself*, and I think that's a *very* dangerous thing to do, and that I would like to call is the ultimate manifestation of self-indulgence … when you indulge yourself in the performance. And you completely take everything that you can from the music that you create without leaving the … the composer on the table. (p.5-6)

Some pianists remarked on the other hand, that exercising *too* much emotional control could lead to a cold or calculated performance. They proposed finding a balance between maintaining and losing control.

Pianist E: I think that's kind of a double edged sword in a way … that you wanna be in control and you wanna really express everything that you have practised … the details, and the general architecture of the work, and the tempis … everything that was rehearsed so meticulously and so carefully. But on the other hand, that can lead into a very calculated performance, so there is always that little … er … balance. (p.3)

Pianist F describes emotional control as a careful balancing act by which he manages the strong emotions which threaten to overwhelm him.

CF: But would you ever say you are overcome by an emotion?

Pianist F: Yes. Yes it's possible.

CF: And it doesn't affect your control?

Pianist F: It could. It shouldn't. But it could. And it has happened a few times.

CF: So is there a … point at which you ever think … oh I must be careful now the emotion might overpower me or do you actually let it go?

Pianist F: Yes, yes. It depends, sometimes you control it, and sometimes you let it go, and hope for the best … not to crash and burn. (p.5)

Pianist G equates emotional control in a musical context with emotional control in an everyday context. He illustrates how emotional control is desirable in order to facilitate necessary thought processes, which then facilitate appropriate actions.

Pianist G: For example, when we're faced with a … maybe a dangerous situation, in which we have to act and do something, we automatically don't let our emotions completely take us over … we are thinking. And you very much have to be in that state when you play, especially music like Albéniz. (p.9)

He also illustrates how the performer can indulge more in emotional abandon when performing less challenging music. If the typical concerns for technical or musical error are removed, the performer can assume more of a passive "listener" role than the active "performer" role.

Pianist G: Or in some of the slower Debussy pieces … like *The Girl With the Flaxen Hair* of course … I do find that I'm able to basically just check out, detail-wise, and just listen to the sounds and the music, and rely on my muscles … because it's slow moving. (p.9)

To conclude, according to the performers, a performance easily spirals out of control when the performer does not sustain strict emotional control over themselves and the performance. The downward spiral which results from losing emotional control was described as follows: excessive or uncontrolled emotional engagement frequently compromised concentration, impeded listening, led to technical, musical, stylistic or memory error, undermined self-confidence, inhibited performance expression, and ultimately prevented optimal performance. Therefore they valued emotional control very highly. While a degree of emotional engagement was acceptable, indulging emotions was seen as posturing, self-defeating, and destructive to optimal performance experience.

Subordinate theme 6: Aspects of expressive performance

One performer regarded emotional engagement as integral to the quality of his musical experience and a vital means of communication with the listener. This suggests that emotional identification and expression plays a central role in musical performance.

Pianist F: For me, it (emotional engagement) enhanced the experience. I could not imagine turning myself into a machine-like performer just forgetting about … that music is all about life and human emotion. That's the essence of music for me. And it is a language and ah, in order to have the power to reach people, it needs to travel through the flow of emotions. It just cannot be otherwise. (p.5)

Technical prowess, cultural knowledge, and stylistic awareness were rated equally as necessary as emotional engagement for expressive performance.

> Pianist A: To be able to express yourself, and to express your emotions in a work, or try to express the emotions that you think the composer felt, um, you need a lot more than the emotions, you need a whole lot of things, technical, knowledge, general culture. (p.15)

Furthermore, musical expression extends beyond emotional expression in some compositions, or passages in compositions, which focus more on aspects of performance which are not related to emotion, such as virtuosic technical displays, sound effects, tonal colours, or structural dimensions, rather than emotional expression. In these instances, other pianistic skills, such as technical prowess, were prioritized over emotional expression.

> Pianist E: Music can express, it can reflect many other things. It can reflect intellect, and mathematical kind of qualities, and architecture, and order, and symmetry. Some audiences would really like that, you know, they would become astonished by the details … either it's an *Etude* by Ligetti or a *Prelude and Fugue* by Bach. (p.16)

> Pianist F: There are several passages in the Hummel sonata, in the last movement in particular, some also in the first movement where um, it's more like a motoric um, sort of flow rather than emotional flow. But they are usually, ah, not very long and they are bursts of er, technical er, flashy display if you will, but then they are immediately surrounded before and after by more expressive content. (p.8)

> Pianist G: Yea, that certainly applies to the Haydn for sure um, where you're trying to create electricity, it's not an angry feeling, but you're creating electricity and excitement, but there's not … I don't feel, especially in the fast digital parts of the Haydn, I don't feel, even when I'm trying to shape a phrase and be musical and make it speak in a way, it's not, I wouldn't say it's an emotional thing. (p.6)

Therefore, the engagement and expression of musical emotions can be regarded as only one aspect – albeit a very important aspect – of expressive performance.

Summary of Superordinate theme 1

The relationship between musical emotions, performance-related emotions, and everyday emotions can be summarized as follows: musical emotions, such as joy or sorrow, are

experienced in response to what performers perceive as the music's emotional essence. They provide the performer with a positive source of emotional engagement. Everyday emotions (positive and negative) fuel performers' interpretations of musical emotions (perceived and induced). Performance-related emotions, such as frustration or anxiety, are experienced irrespective of the music's perceived emotional essence. Table 4.2 presents a summary and comparison of the performers' experiences of musical emotions, performance-related emotions, and everyday emotions.

Table 4.2: Performers' views on musical emotions, performance-related emotions, and everyday emotions

Musical emotions	Performance-related emotions	Everyday emotions
Positive and negative valence	Negative valence	Positive and negative valence
Experienced indirectly	Experienced directly	Experienced directly
Indistinct, highly nuanced	Distinct, identifiable	Distinct, identifiable, nuanced
Relate to the music's emotional content	Relate to performance circumstances or events	Relate to everyday experiences
Anticipated	Not anticipated	Anticipated/ not anticipated
Stored in musical structure	Occur randomly	Occur in response to an event
Voluntarily accessed in performance	Involuntarily experienced in performance	Voluntarily accessed and involuntarily experienced
Independent of external, non-musical variables	Response to non-musical, internal or external variables	Response to internal and external variables

The analysis indicates that both student and professional performers engage with a range of aspects relating to musical and performance-related (non-musical) emotions throughout their performances. They were usually emotionally engaged to some degree during their performances (either in specific instances or for extended periods), but they did not attribute this engagement to specific musical emotions. Managing experiences of musical and performance-related emotions is central to optimal performance. Musical emotions were experienced more powerfully when practising than during performance. Finally, music and musical performance encompasses more than emotional engagement and expression.

4.2.2 Superordinate theme 2: Performance as an embodied cognitive, emotive, and motor experience

The analysis revealed that performance is experienced as a complex, multi-layered phenomenon of integrated cognitive, emotive and motor functions which are embodied by the performer. This phenomenon is addressed in this section in three subordinate themes: a performer–composer union, cognitive–emotive duality, and embodied performance.

Subordinate theme 1: Performer–composer union

A dynamic dialogue exists between performers and the composers they represent. Performers operate as musical mediators who communicate with the audience on behalf of the composers.

> Pianist F: I cannot think of one single moment during a performance … where I don't try to be a beacon ah, or a medium … to *reach* the audience. (p.1)

However, performers are more than musical messengers. While wanting to represent a composer's perceived musical identity, emotions, and intentions as accurately as possible, a performer also has a strong hedonistic desire to experience personal emotions and fulfilment in performance. This is specifically achieved in performance, indicating that performance serves the musical purposes of both the performer and the composer.

> Pianist E: The respect to the composer, to the details, to the music that you bring to the audience … you didn't create that music, you are an intermediate, you are a messenger. I definitely don't want to lose that. On the other hand, I do want to feel fresh, I do want to feel new, and I do want to have a glorious experience, an emotional experience … creative experience … every time. (p.9)

The performer's first priority is to honour a composer's perceived intentions through an accurate representation of a score's non-expressive information (structural or stylistic indications), as well as its expressive cues (tempi or dynamic markings). The performer's second priority is to personalize these representations through their individual interpretations. This process of personalisation, or interpretation, brings a new dimension – the performer's identity – to the composition.

> Pianist G: I find it such an interesting challenge to bring a bit of your own spin or … not your own spin but your own personality … to what the composer has dictated. Because I really can't

> think of any great composer that was not … just beautifully specific in what they wanted, and had a great ability to bring their own music, and their style of their time to life through what they wrote in the score. (p.16-17)

To create a unique representation of both the composers and themselves, the performers endeavour to connect with the composers prior to the performance, when studying a composition. Establishing this intense and intimate connection is experienced as an extremely unifying process.

> Pianist B: It's the marriage of the two … my preparation is … I feel I need to *relate* to what the composer is trying to say as well … you have to stay true to the intimacy between you and the composer and the music. (p.9)

A performer–composer union thus begins to evolve from the moment the performer begins to study a composition, and extends into the performance itself. It is a process through which the performer's identity merges with the composer's identity, and is integrated into the composition through the performer's musical choices. Pianist E outlines the process through which performer and composer identities merge, evolving over many stages of preparation.

> Pianist E: I think the first thing is to play, and play a lot. To perform, and to perform a lot, and not just when you practise. There is that kind of x factor that happens when you are performing a piece. And there is also the process of evolution that happens for most pianists, for most artists, that is … from the moment you heard it for the first time, through reading it, through practising it, through the first performance, and then more and more and more performances. (p.6)

According to him, memorisation is a stage in preparation when all the musical information and structures are completely absorbed by the performer, and the performer enters a deeper realm of musical connection with the composer. Memorisation separates the performer from the distraction of the musical score, enabling the performer to understand the composition at a deeper level. This in turn triggers the kind of creativity which leads to optimal performance.

> Pianist E: There is one little stage, by the way in between that is the moment you memorize it, and you really don't have to look at the score anymore, and it's all in your head and that … takes a different dimension in that moment. I think the creation process starts there. The creation process starts when you don't have to look. And then when you really start to create not just moments but you start to create … larger sections you start to understand the dynamics of the piece, and I don't mean the dynamics by piano forte, I mean the way the piece has its own

> momentum and its own direction um, and that's when we start to also understand the architecture. (p.7)

A performance becomes unbalanced if performers prioritize their emotional responses over other aspects of the performance. Pianist E describes this as an emotionally indulgent performance, representative of showmanship rather than artistry. He considers the performer–composer union a crucial element of musical integrity, and the key to powerfully expressive performance.

> Pianist E: I try to create the experience of performance as genuine as possible to what the composer wrote, with my understanding of it of course. And I think it triggers things in the audience, and I think really *this* is my role. My role is not to cry when I play the Funeral March … or to cry metaphorically speaking. Or to feel incredible cuteness when I play the second movement of Moonlight, you know that Minuet there. I don't think that's my role. I think my goal, at least in that whole experience of … pianist–composer–performance is to … kind of put it on the plate, in the most compelling way. And then something miraculous happens, and that is, it makes a psychological and emotional effect *individually* on every part of the audience. (p.14-15)

The performer–composer union may become unbalanced after repeat performances, if the performer builds on former performance experiences, rather than staying true to the score. This can be avoided through referring back to the score post-performance.

> Pianist E: I have to remind myself now immediately after the performance that I still play Chopin, I still play Beethoven, I don't play myself. And tomorrow when I go to practise, I really have to go back somewhat to the score, to the clean approach a little bit, and not to let what happened today completely start another process of creation that would be based on what I played. Because what I played today is … Beethoven and Chopin, with a *little* bit of me already inside of it. So if I add another self on top of that, then that's a very … *that's* the word … self-indulgent … I am indulging myself with the experience of performing, and I *lose* the respect to the composer that I am performing. (p.10)

The score guides the performer initially in forming an interpretation prior to performance. Performers correlate their induced feelings with the composer's perceived emotions during this process. Strong feelings are adjusted to accommodate the composer's emotions, creating an interpretation which represent both performer and composer identities.

Pianist C: I think it depends on if you are performing or listening because um … if you're performing then the score comes first, and then you must adjust your emotions, or feel according to the score what you are supposed to feel. (p.14)

In the event that discrepancies between perceived and induced emotions arise during interpretative stages, performers may take artistic liberty in favouring their own feelings over the perceived emotions.

Pianist G: I do remember making conscious decisions in some repertoire where um it often is emotionally based, and sound based where I feel a colour change, and I feel a certain emotion that's associated with something that's happening in the music, that I just can't see any other way, and it goes against, sometimes the opposite, or a little bit different from what the composer has written. And I make the conscious choice to do it my way. And it's, now that I think about it, it is emotionally based. It's usually something … it's an emotion that I want to bring off, in myself, and also to the audience, that I really can't see any other way. And so I make the *decision* to do it that way. (p.17)

The performers did not wish to overpower the composer, and genuinely endeavoured to cultivate the performer–composer union which they presented in performance. The process of finding a way to accommodate these two powerful identities was very challenging, and required constant effort through the preparation and performance stages.

Pianist E*: That* is what I'm bringing really, I'm bringing the composer, I'm not bringing myself. At least that's my approach. So to have those two … happening at the same time um, is I think not a given. It's not, it doesn't happen, by itself. It … it's not something that would *just happen*, it's something that you have to really maintain in every given moment. (p.6)

Pianist H: It is a communion … that complete oneness. (p.6)

In sum, the performer–composer union is a constantly evolving relationship which intimately connects a performer and a composer. This means that the union is totally unique, and can never be imitated by another performer, or reproduced exactly in different performances. Becoming one with the composer through creating and managing the performer–composer union was given the highest priority by the performers.

Subordinate theme 2: Cognitive–emotive duality

This theme explores how performers experience, and perform, the performer–composer union during performance. In the interviews, the performers became aware that two separate parts of their musical minds were functioning independently of each other during the performance. The division of the musical mind is referred to as a cognitive–emotive duality.

> Pianist G: Yea … definitely two different parts of the brain um, the logical part … combined with the emotional, creative part. (p.10)

> Pianist A: There's a part of me that participates in the music emotionally, but there's another part that has to remain concentrated and keep everything together. (p.3)

During performance, Pianist E experiences the performer–composer union as a "dual personality". The dual personality is represented onstage in his stage persona. He identifies one character in his stage persona as the "professional" or "evaluator" who represents the composer's intentions. The other character in his stage persona is the "person" or "creator" who communicates the performer's intentions.

> Pianist E: There is some kind of a dual personality when you play. At least when I do. As I said, there is that *professional* pianist that is always trying to play um clean er execute all the … the micro and the macro, the macro and the micro … the small details, and the big scale perception of the piece. That professional is always … at least in the last you know 15–20 years … always exists and it gets better and better – I hope so. The self-control if you want to call it like that. But on the other hand, there is that er … *person* or that other side of the personality that wishes to express as much as possible, that wishes to get carried away by the music, to be … *affected* as much as possible by the music. (p.4)

Both Pianists E and F describe their experiences of this duality as a schizophrenic phenomenon. While an obvious misuse of the word, it effectively illustrates the extreme *separateness* of the two aspects of the performer's stage musical persona.

> Pianist F: I think it's a controlled schizophrenia because your brain basically splits into two different parts, one that is the controller and that checks that everything is being done the way it is supposed to, and the other one just emotes and … feels. They co-exist yes, the controller and the … emotional part. (p.2-3)

In this example, Pianist F's description of a "controller" and "emoter" correlate with Pianist E's description of the "evaluator" and "creator" respectively. The "evaluator" or "controller"

appears to function at a conscious level and monitors the practical aspects of the music e.g. technical challenges, structural and expressive cues, and memory control. It is described as highly concentrated and controlled, and represents the composer's identity. It is the aspect of the performer which develops with education and experience, and is consequently perceived as the "professional". By contrast, the "creator" or "emoter" is associated with the more instinctive, unconscious aspect of the performer's engagement with the music. Described as creative, spontaneous, and free to emote, it represents the performer's identity. It evolves with personal development and maturity, rather than training. In other words, it is not an aspect of the performer which can be trained. The performers refer to this part of their performance persona as highly "personal" or their "souls".

The performers described the cognitive–emotive duality as a skill which is refined through years of experience.

> Pianist G: I … over the years have … developed the skill of combining that state of ecstasy where you were just enjoying the music and enjoying what's going on – no matter what emotion it is – combined with being aware of the notes that I am playing, the theory behind it *actually* what is going on. Because for a while um in the formative years, it was one or the other. (p.8)

In addition to it facilitating the most accurate representation of the score, the performers maintained that a cognitive–emotive balance ensured that they themselves had an optimal performance experience.

> Pianist E: So there is always that little er … balance. On the edge of … losing yourself a little bit in the performance, but also keeping and maintaining the, you know the left side of the brain, or the right side (laughs) … the *intellectual* part of the brain that can *evaluate*, that can really listen, and hear what you are doing at that moment. Um, *that* is I think the ultimate goal for me as a pianist er when I perform. … to have a tunnel vision, to be in a zone, to really experience those two … *maybe* some would say mutually exclusive experiences of the evaluation but also ... the creation. (p.6)

> Pianist D: It's a *balance* … it's on par … your ability to balance your cognitive and your subconscious – your emotions. So when you balance all those things the music comes alive for you. Because then it … it's like you go to the next level … that Nirvana state. (p.19)

The cognitive–emotive duality describes how performers manage to communicate the complex performer–composer union on stage while performing. Attaining the perfect balance inherent in the cognitive–emotive duality produces an optimal level of performance.

Performers therefore strive to cultivate this balance as it allows them to experience a transcendent state of mind, which in turn produces an optimal performance experience. It seems evident that performers' perception of the cognitive–emotive duality is honed with time and experience. The analysis further suggests that the balance needs to be controlled by the performer. These two concepts are explored in superordinate theme 3. Aspects of the cognitive–emotive duality are illustrated in Table 4.3.

Table 4.3: Cognitive–emotive duality

Cognitive aspect	**Emotive aspect**
Expresses composer's intentions	Expresses performer's intentions
Evaluator	Creator
Monitors technical, stylistic and structural aspects	Free to emote and engage in emotional experience
Highly skilled, concentrated, controlled	Unique, individual, emotive
Develops with education and experience	Evolves with personal development and maturity
Professional	Personal

Subordinate theme 3: Embodied performance

Several performers expanded the cognitive–emotive duality, explored in the previous section, to include the role of their physical experiences during the performance.

> Pianist H: It makes so much sense not to separate our … thinking, feeling beings from our physical beings, we're like one big fat unit … that's what I apply in terms of the piano. (p.19)

Several student performers reflected on the influences of physical aspects, such as comfort, breathing or stamina, on their performances.

> Pianist A: In the first work … my piano stool was too high so I couldn't get my weight in, and this um, caused me to be a bit less open and er, to be able to express myself completely, and so I did … I felt I did participate in the music, but I could have done more. (p.2)

> Pianist B: And I feel myself breathing … breathing deeply … and it's effortless. (p.8)

Pianist D: I've played for three hours on end at home … to have the *stamina* to do it. But I mean it's completely different here. Your mouth gets dry … your hands are sweaty … you're quite jumpy. (p.10)

The professional performers thought about this aspect of their performances in far more detail than the student performers, describing performance as an entirely unified cognitive–emotive–physical experience which engaged all their mind–body faculties at once. They also spoke in more abstract terms about the "oneness" they felt with the music, and how their physical involvement contributed to this phenomenon. Their performances reflect an embodiment of their musical personas. Often their descriptions of how they felt towards the piano, an inanimate object, when very moved or connected with the music, included words such as embracing, being close to, or hugging the piano. This closely resembled how they would express their emotions towards an animate object.

Pianist F: Well if um … I am thinking about passionate moments in a piece of music um … that somehow sometimes can make you feel more the idea of moving … moving forward, almost like *hugging* the piano. (p.4)

Pianist G: Heightened emotional intensity … whether it be um … sort of leaning in and experiencing a … more of a closeness with the instrument. (p.2)

Pianist H: I when you sit at a piano … I can take it in and it's this sort of *embrace* that you can do here, and it feels like your whole body's just ready to be part of the piano. (p.16)

Pianists G and H illustrate how their bodily expression reflects the emotional energy of the works they were performing.

Pianist G: In the Haydn for example … it's a very lively piece, it's very humorous. So I find myself almost sitting up straighter, like I'm filled with happiness, and I feel a bit lighter almost. And I think that's because of the positive energy… of the piece. (p.2)

Pianist H: I imagine the energy sort of coming up over here … [draws arms up the back and over the head], and doing this [down front], and that [down legs]. But for me it's imagining the energy, 'cause I think it does come from the sitting bones and the feet. … and I think also a lot, I mean, in terms of that [indicates distance from wrist to fingertip] … about the fingertip, and this amazing feeling inside the arm, and you know how loose that can feel, you know you can do anything, or you caress, or you hold or whatever, and it's all literally within our hands sort of, and our hands are just like ear extensions. (p.16-18)

Performance is therefore a physical as well as a cognitive and emotive experience. The student performers were less aware than the professional performers of the integral role the body plays in the performance. The professional pianists reported particularly strong physical affinities with the piano. Whichever energy they experienced appeared to flow directly into the instrument, enhancing the performance expression. The music's emotional energy was transmitted through the performer's gestures into the performing arena, serving the purpose of emotional communication. The pianists also experienced a degree of sensual pleasure through touching or caressing the piano. This means that the performance can become a sensual experience, in addition to a cognitive and emotive experience.

Summary of Superordinate theme 2

Through cultivating a perfect balance between cognitive, emotive, and motor functions, performers achieve their ultimate goal of performing a version of the score which both accurately represents the composer, and reflects their own artistic identities. Musical performance is a highly personal, integrated cognitive, emotive and motor experience, a unique phenomenon which represents the unique musical meeting of performer and composer.

4.2.3 Superordinate theme 3: Optimal performance experience

At times, the performers became so absorbed in their performances that they experienced an altered state of consciousness, frequently referred to as "being in the zone". These experiences are presented in the next section as two subordinate themes: defining the zone, and aspects of the zone.

Subordinate theme 1: Defining the zone

The altered state of consciousness which results from complete absorption in a performance is characterized by feelings of profound bliss.

> Pianist G: People say you're "in the zone", it's like you're in another state of mind, on another planet almost … when I hit the zone, I feel very calm. I know my heart, whereas it might race before I go on stage from nerves, my heart is noticeably *not* racing, it's noticeably calm. I sometimes get goose bumps um, from just the sound and just the emotions that are drummed up from what I'm hearing. I talked about sitting straight and being lifted in the Haydn, but I feel a lift – emotionally – that's different from a physical lift, it's almost like yeah, it's almost like I'm

being supported by a cushion of … like I'm sitting on a cloud almost … being supported by a cushion of emotion, of ecstasy. (p.7-8)

Pianist F: It's totally absorbing, one hundred percent. (p.12)

When in the zone performers are deeply concentrated, calm, happy, relaxed, free, confident, highly focused, and in control of themselves and the performance.

Pianist H: It's very focused but it's not controlled, it's like this happy confidence. And I just have fun you know … which sounds very superficial, but it's not … it takes you back to that kind of blissful state of … all I've ever wanted to do is play the piano, and life is perfect when you can do that. (p.13)

During a zone experience, performers constantly balance both cognitive and emotive aspects of their musical engagement. Each aspect plays a vital role in the performance, and functions at maximum capacity. However, when in the zone, the performers were *not consciously aware* of specific cognitive and emotive processes. They described the zone as transcending cognitive, emotive, and physical awareness. They were therefore not consciously aware of specific thoughts or feelings. The music ran on "autopilot" and flowed effortlessly.

Pianist D: You're *experiencing* the notes as you play them. Not necessarily *thinking* of them but letting them flow from you. (p.16)

Performance error immediately breaks the transcendent state, as the performer has to concentrate specifically on "fixing" the problem. The cognitive–emotive balance is disturbed, and the performer returns to reality.

Pianist A: And, when you are in the zone um … everything sort of … comes on its own. It flows and when you suddenly make a mistake, or something sudden happens, you are shocked back into reality. (p.17)

Performers aspire to being in the zone where they feel musically inspired, creative, and "in the moment". This may lead to new sensations, insights, or heightened emotional engagement not previously experienced.

Pianist A: So sometimes what happens when I play is … the music – obviously you're controlling it, you're playing – but it's as if the music takes you somewhere where you haven't been before, and it lets you taste or feel an emotion – or an experience – which you've never felt before, even in practising it, which happens when you perform … but not always. (p.9)

Pianist B: I felt like I was in the moment, and I felt like what I was saying with the music was true to what I wanted to say. I felt very *creative.* I felt … that it was happening as I planned it. (p.8)

The performer assumes a new, more central role, when in the zone. At this point, the performer has encoded all the musical information, formed a unique performer–composer union, and overcome all non-musical distractions and inhibitions. The performer then responds to the music differently. Unlike the earlier *unprocessed* responses to the music, the performer's responses are now refined, and represent the integrated performer–composer union. This leads to an exhilarating sense of freedom, where the performers engage with music in a different, almost improvisatory, way.

Pianist D: So I would say it advances to the next level, where you *forget* the notes and you *forget* the evolution of the music, and it's like you're on a clean sheet. And it's like the composer hands the page to you and says … now *you* give the dynamics, *you* give the score indications. (p.21)

When engaged at this level, some performers become inspired to such a degree that they understand aspects of the music in novel ways. The music evolves further during the performance, as a result of the quality of the zone experience.

Pianist A: In the second work, I felt very comfortable, and I felt that I was participating a lot. In fact, I realized some things about the music while I was playing that I hadn't thought about before. (p.2)

Pianist E: The emotions that I experienced today have *changed* some of the way that I play this music. I would submit to you one more even um … more interesting element – that I will *not* play the music that I played today *ever* in the same way *because* of the way my emotions today have influenced, and even created some kind of evolution in the way I perceive the music. I cannot manufacture it again, and I don't want to manufacture it again. (p.9)

Several performers described losing their awareness of time or self. Some performers experienced a loss of self-awareness to such a degree that they felt physically removed from their bodies. They experienced a profound sense of connection with the music, and sometimes even the audience.

Pianist B: It's very relaxed, but it's as if you're watching your hands … as if you are enjoying the music with the audience, and not really doing anything. You're hearing it, but at the same

time you're controlling it too. And you're hearing wonderful things happen, but you're not controlling it, you know what I mean … it just happens somehow. (p.8)

Pianist H: And it's self-fulfilling, it's a *deep* sense of connection with the music, and with the world, and with the audience. Because when you get into that good space … and I felt a lot of it with the audience tonight … I thought we're all doing this together. Because I might be making the notes come out of the piano, but they're listening, they're completing this process, and it's like … aah fantastic. (p.13)

Another performer described a similar sense of transcendence, but denied that this extended to an out-of-body experience, as he felt very much present in the performance. He particularly enjoyed the physical aspects of performance.

Pianist F: Yes I am there. I am there … because I also relish the physical contact with the instrument. I think it's a … a love affair really and you don't want to be distant. As I said there is already a part of the brain that controls things and that elevates itself a little bit to be … from above … control everything. But not from a distance really. Or I don't feel … removed, no. (p.11)

Several performers compared their experience of an altered state of consciousness in the zone to a spiritual experience, where they feel a profound sense of "oneness" with the universe. The performer's musical experience is at its most profound when in the zone, as it provides an opportunity to experience a different conscious dimension within which the performer can create and express uniquely intimate musical thought and feeling.

Pianist H: I'm a complete atheist right, but I think music is a sort of spiritual thing, and we all get to a space where we know we're relating, ok? And it's that space which is a spiritual space, it's the place of … extreme integrity to your particular discipline … and it's about being nakedly honest, so that it's like you're prepared to sort of eviscerate yourself and say … here's my heart. This is the relationship between you and your discipline where … you can sort of face your honesty, face your vulnerability, and take risks. You know, you can play something and say … I don't know where it's going to take me … in other words, you're moving out of your inner safe space but your guide, if you like in a way, is integrity. (p.6-7)

Pianist E asserts that the zone has an element of mystery, or the unknown, which attracts both performers and audiences to performance. He maintains that the highest degree of creativity is triggered in the zone.

> Pianist E: No I don't know if I want something new. I don't want anything! That's the point! The point is, there is always an element of unknown, and this is *exactly* why people are going to listen to concerts. And it's *exactly* why we are doing what we are doing as performers. That unknown freaks some people out, I am sure. But to some of us it is the greatest narrative of creation. That's the trigger, this is the spark – the unknown. (p.13)

The zone is attainable only through the performer's commitment to reaching it. Performers whose performances were motivated by other factors, such as ambition, or fear of failure, struggled to achieve a sustained zone experience. The zone offers the performer a space to emerge as a new musical identity, which transcends the individual performer or composer identities. This is the most creative space the performer can experience.

> Pianist H: In the working process up to that point, you need *utter* commitment … to the space … beyond your personality, beyond the composer's personality, beyond the music. It's the space where the music exists as an entity in its own right, and I've worked with a lot of composers, but I've heard them talk about … oh the music just happened … but it's like there's almost … something inside them and the music exists. You know some people say … oh you're just a conduit … and I think that's taking it way too far, but in a sense the music does take on a life of its own. (p.6)

In sum, performers' experience of the zone is a profoundly satisfying, altered state of consciousness, in which they feel inspired, creative, and blissfully happy. They are unaware of cognitive thought or emotion, and frequently lose track of time and self-awareness. If any musical error occurs, this altered state of consciousness is broken, and the performer returns to reality in order to correct the error. In the zone, performers present a perfectly balanced cognitive–emotive representation of their musical interpretation. However, the performer plays a more central role at this stage in the performer–composer dialogue, and experiences an exhilarating sense of freedom which may inspire spontaneous musical creativity. The next section discusses whether performers can influence or predetermine a zone experience.

Subordinate theme 2: Factors influencing the zone

This section explores aspects of the zone in more detail. It was evident at this stage of the analysis that performers experienced the zone as the most satisfying dimension of a performance, largely because it allowed them to fulfil their creative potential. As a result, the performers strongly desired this experience of transcendence, and felt frustrated when the experience was thwarted.

Pianist H: Sometimes there are days when you think … I just cannot get into that amazing, happy, free place where … you sort of throw everything out of the window and it's like … ah God, this just feels awesome. (p.12)

The performers were aware that a zone experience did not automatically occur in every performance. Although they did not guarantee a zone experience, many performers maintained that there were a number of factors which may predispose a zone experience. The next section presents the factors which may facilitate or restrict a zone experience in two categories: a) facilitating internal factors which the performers could control; b) inhibiting external factors related to the performance context.

a) Facilitating internal factors which performers could control

Preparation

In order to enter the zone, performers must be so well prepared musically that the performance proceeds without error. Performers describe this phenomenon as running on "autopilot". An autopilot performance is a performance which is uninterrupted by technical, musical or memory error. Performers no longer consciously manipulate any musical aspects of the performance, and rely solely on muscle memory to execute their performance. Meticulous technical, musical, and memory preparation is therefore a critical requirement for performers to enter the zone.

Pianist G: I have developed the skill of being able to consciously enter the zone, I can consciously check out … and that's muscle memory. You allow yourself to check out and go on autopilot, and rely only on muscle memory. (p.12)

Pianist D: And that evolution of the music and getting into the zone… it doesn't evolve, you have to *get into* the zone, a piece doesn't always necessarily *start* in the zone. Ok so it's … whether you play well. Aspects which can get you into the zone are your runs work clearly, the piano sounds beautifully. Sometimes it happens that there was a zone where there never was a zone before. So you just *hear* this music and you think *whoa* ... ok I can use this and then you emphasize that part. (p.21)

If a performer is sufficiently well prepared for a performance, a zone which has been disrupted can be restored during the performance. Focusing on cognitive, emotive, or motor aspects of the performance helps to restore a disrupted zone. For example, Pianist G describes how singing a melody in his mind enables him to overcome a memory slip or performance

anxiety, and re-enter the zone. Engaging with the positive musical emotion (enjoyment of that melody) allows him to overcome the negative performance-related emotion of worry and self-doubt, and resume the zone experience.

Pianist G: I can remember many times, in many recitals, where I either have a memory slip or feel one coming on. I feel hesitancy and doubt coming on, and I … one of the things that gets me into the zone, where I can just be out of … worrying about the logic of what's going on, is singing … only in my head, I don't sing out loud. I tell myself to sing in my head, consciously sing the melody that I'm playing, and that puts me back into … a purely emotional, non-logical state, and allows me to get through that memory slip. (p.12)

Later he describes how focusing on musical structure (cognitive), or finger work (motor), has a similar capacity to restore the zone experience.

Pianist G: And I find similarly to thinking about singing, where that takes me into an emotional place, if I think consciously about a theory or a chord structure or a finger placement or something, that's also… it's a more logical thought, but it is a thought that takes me out of worry, or anxiety … or 'this is going to happen, this memory slip is going to happen'. So it can for me be one or the other. It's more often singing and emotion taking me into a purely non-verbal non-cognitive place. But it can also be 'let's think about where my fingers are, or what chord I'm going to', it can be something more logical as well, that takes me into the zone. (p.17-19)

If preparation is incomplete, the performer will not be relaxed or confident enough to relinquish musical control of the performance, and will not sustain a zone experience.

Pianist B: There are moments of sort of mental interruption, *conscious* interruption for me, where, when I get to a spot where I need to remember say, a harmony, or when I rely on a very conscious memory. And it's usually on a place where a day or two before the performance, there's something that goes wrong, and you sort of practise it over and over. Or something that doesn't work musically also, and when you get to that spot, you come out of the transcendence, you make sure it happens correctly. But it's usually for a split second onstage, you sort of slip out of that zone for a split second, but you go right back. (p.10)

Emotional control

As strong musical and performance-related emotions generally lead to error, maintaining emotional control is crucial to a zone experience. Emotional control is therefore a critical factor in facilitating a zone experience.

Pianist A: When you are on stage, you have to force yourself to stay calm … just don't try anything new. Just do what you know to do, and let yourself go with the music, but always keep control. (p.10)

Pianist D: My primary goal in making music is for my own enjoyment. And I can only enjoy the music once all those things are under control. Because when you're in control of this whole thing, this perfect harmony just sounds, and you listen to the music. (p.14)

Disruptions of the zone arise when the cognitive–emotive balance is disrupted, for example if the performer becomes too emotionally involved in the performance at the expense of cognitive engagement.

Pianist G: Most of the tiny memory glitches I had tonight were moments when I caught myself … not using the logical part of my brain. And in that moment when I had the memory slip I thought … oh I have to get back to combining the logical and emotional. I have to bring myself back, and be aware of what I'm doing. (p.19)

Concentration

The performer's ability to concentrate and focus exclusively on the music plays a key role in facilitating the zone. This kind of concentration is initiated prior to the performance, and sustained during the performance. It enables performers to deal with both musical and performance-related distractions arising during the performance.

Pianist H: The (mental) preparation is really important … I sort of stop talking to people a few hours before I play, you know, I get quite antisocial … because you're kind of focusing in on that point in time. (p.10)

Pianist D: I think you yourself can be your greatest distraction – wandering off with thoughts. Because I mean it's so automated what you do. You play these pieces, and by this recital … I've never played this long in my life so by the end of it … you get … oooh ok I'm hungry now. And also when you're looking at your hands, you … oh my sleeve … things like that, and then immediately you just lose it. (p.9-10)

Concentration also plays an important role in determining whether performers can overcome all performance-related distractions encountered during performance.

Pianist F: The disturbing elements did fight harder to get me out of that state but I don't think they succeeded. I had to fight harder. The concentration had to be deeper tonight, to really shut everything else out. (p.8)

Maintaining the required level of concentration required to enter the zone is a skill performers acquire through experience.

Pianist F: I think it (concentration) has improved with time, because as you do it more and more, as you perform more and more, you learn how to control yourself, and you learn how to ah, pace yourself, you learn how to ah, concentrate even in the grimmest of situations. (p.9)

b) Inhibiting external factors related to the performance context

External factors which may distract the performers tended to be circumstantial and beyond the performers' control. These factors, which included extreme temperatures in the hall, inferior instrument, poor lighting, and audience distractions, are illustrated below.

Extreme temperatures in the hall

Pianist G: There are a couple of spots I remember slipping out briefly. One was in the Haydn, in a particularly fast passage in the second movement, where my fingers where so cold that they just weren't moving as fast as they normally do. And I consciously started to think about that, and I was taken out of my normal thoughts that I have during the course of the Haydn. (p.18)

Inferior instrument

Pianist D: The piano can be a big distraction because it might be unfamiliar to you, and it might not respond as you would have liked it … and obviously the pedal is working as well. (p.9)

Lighting

Pianist D: Lighting can be very distracting the venue as such. Sometimes the venue is not suited, or the piano is not suited to the venue. But this is perfect here, but the lighting, sometimes you get a light flickers which is *very* irritating. (p.9)

Audience response or presence

Pianist D: Obviously the audience. The audience plays a great part, the coughing or unresponsiveness … maybe not enthusiastic clapping afterwards. That can put a damper on it (p.8) … There shouldn't be people in your line of sight 'cause that can be very distracting if you look up from the keyboard … and you're looking straight into the person and make eye contact … that's very distracting. (p.10)

Finally, none of the performers remained in the zone *throughout* their performances. It appeared normal to slip in and out of the zone during a performance, without the performance being noticeably affected.

> Pianist D: No you go in and out. I would say it doesn't happen often that you are able to stay in the zone for the whole length of the performance. Because people cough and I … it takes a split second to get out of that. And it takes a note that is weird or your hand doesn't stretch over far enough and you think … oops … and then you're out of it. And then you have to get back in there. (p.23)

> Pianist C: I think you do it automatically after a while, because you're so concentrating on … what notes are coming next, and what effect you want to get, that you kind of zone out um from things that distract you at a stage. … I think for me it kind of went in and out today because then I would catch myself thinking about stupid things, and then I would take my concentration back to what I'm actually doing on the piano. (p.13)

In sum, there are three main aspects of optimal performance which performers can prepare in order to facilitate a zone experience: meticulous musical preparation prior to the performance, emotional control during the performance, and powerful concentration during the performance. The performer's expertise determines the degree to which these aspects are mastered. There are, however, also a number of inhibiting factors which present themselves in the performance context, such as hall temperatures, quality of the instrument, and audience distractions, which the performer has to manage without preparation. Learning to manage disruptive factors such as these is learned with experience. Performers' expertise and experience therefore impacts significantly on their prospects of reaching an altered state of reality, or Flow, during performance.

Summary of Superordinate theme 3

When performers become totally absorbed in their performance, they may experience a transcendent, altered state of consciousness which they refer to as the zone. This transcendent state is deeply desired by performers, as it is both profoundly satisfying and offers them a musical realm in which they are inspired to perform with enhanced creative powers. Performers' expertise and experience plays an important role in facilitating Flow. However, Flow remains unpredictable, and is not a guaranteed result of either expertise or experience.

4.3 Summary

This chapter presented a detailed IPA analysis of the research data. Three superordinate themes – performers' experienced emotions, performance as a cognitive, emotive, and embodied experience, and optimal performance experience – emerged from the analysis. The themes were underpinned by eleven subordinate themes and numerous extracts from the verbatim texts. The findings will be discussed in relation to the existing literature in the next chapter.

Chapter 5
Discussion

5.1 Introduction

The study set out to understand the role of the performer's emotional engagement with music during performance. This emotional engagement is complex and involves the interaction between the performer's emotional engagement with emotional and musical expression. To date, research in music and emotion has neglected to understand this from the performer's perspective and presents a number of conflicting views. A discussion of the interview data is presented in this chapter with reference to the three superordinate themes: 1. Performers' experienced emotions; 2. Performance as a cognitive, emotive, and embodied experience; 3. Optimal performance experience. The findings will be viewed in relation to current literature on music and emotion. A summary concludes the chapter.

5.2 Superordinate theme 1: Performers' experienced emotions

Researchers agree that musical emotions are induced by music (Juslin & Sloboda, 2010a), but very few researchers offer further insight into the exact nature of musical emotions. With specific reference to whether performers experience musical emotions during performance, Hodges and Sebald (2011) highlight a current incongruity in the literature: some performers claim they feel the emotions they are expressing, while others contend that a true experience of strong emotions would make playing an instrument or singing extremely difficult.

The findings of the analysis shed some light on this apparent contradiction. The performers identified either specific instances, or extended periods, of high emotional arousal in response to music during their performances. The extended periods of high emotional arousal did not correlate with specific perceived musical emotions, and will be discussed in section 5.4. The specific instances of emotional arousal sometimes correlated with the precise musical emotions they perceived to be in the score. However, the intensity, directness, definition, complexity, and scope of these musical emotions – when they correlated with the perceived musical emotions – differed significantly from similar emotions experienced in an everyday context. Therefore, while emotionally aroused in response to the music, the performers did not appear to experience the raw essence of an emotion in the same way they would in an everyday context. Furthermore, the complex nature of the performers' musical emotions – if identified – resonates with a finding by Scherer et al. (Scherer et al., 2001-2002, in Sloboda,

2001-2002) which reports that listeners describe their musical emotional experiences as highly complex, seldom using "basic emotions" – happy, sad, anger, fear, disgust as suggested by categorical theorists of emotion (Sloboda & Juslin, 2010: 76) – to describe their emotional engagement. This appears to apply to the performers' experiences of emotion as well.

The suggestion that performers may experience musical emotions in a performance context in a particular way resonates with Juslin's (2011) assertion that the *context* of a musical experience influences an individual's emotional response to it. The description of a musical emotion provided by Pianist E as "watching oneself in an opaque mirror" suggests an emotional detachment, or distance, from the everyday experience of emotions. This description also resonates strongly with a notion of *refined emotions* proposed by Frijda and Sundararajan (2007, in Juslin, 2011), which proposes that emotions are experienced in a special mode in certain contexts. Refined emotions are characterized by attitudes of detachment, restraint, self-reflexivity, and savouring (Juslin, 2011: 127), a description which characterizes the way emotions were viewed by performers in the current research.

The essence of a musical emotion is therefore not readily comparable to an everyday emotion. In a performance context, an everyday emotion appears to go through a process of transformation which allows it to manifest itself in a musical form. This process is influenced by subjective factors, such as profound enjoyment of performing a work. For example, Pianist E elucidates how his ecstatic happiness during performance has the effect of significantly reducing the intensity of a powerful negative everyday emotion which he wishes to communicate to the audience. The positive performance context effectively counteracts a powerful negative musical emotion, allowing the performer the mental space to communicate the 'filtered' musical emotion, rather than be overcome by its raw everyday essence:

> I think in general it *is* different from my everyday experiences because um, *because* of that prevailing sense of ecstasy, because I so enjoy what I'm doing … so much that even when the music is extremely painful, or extremely angry, I can't *possibly* compare it to the pain that I feel when I've had relationships break up … or lost a pet … or whatever. There is no way. I know my emotions are so much more heightened in those non-musical situations. (p.21)

It is likely therefore that those performers who claim that they feel the emotion they are expressing (Hodges & Sebald, 2011) are referring to their experience of the *musical manifestation* of the emotion, rather than its everyday form. By the same token, performers who claim that it would be too difficult to perform if they truly felt the emotion (Hodges &

Sebald, 2011) are referring to the more powerful experience of an emotion in its everyday form, rather than its musical manifestation.

In addition to establishing that performers experienced some kind of emotional engagement during performance, the findings of the analysis elicited some detailed insights into the nature of their emotional engagement. Listeners' emotional responses to music are explored by Gabrielsson (2001-2002), who distinguishes between perceived musical emotions (the recognition of an emotion) and induced musical emotions (an actual feeling). When exploring performers' general experiences of emotional expression, studies by Persson (2001), Woody (2000), Lindström et al. (2003), and Van Zijl and Sloboda (2011) claim that musicians *in general* think they must experience emotions (induced emotions) in order to perform expressively (although Lindström et al. (2003) conclude that there was insufficient evidence in the study to support this notion). The results of this study refute that claim as the majority of the performers, when reflecting on their emotional engagement in their recent performances, seldom recalled experiencing the *precise* musical emotion they perceived to be in the score. Yet they felt they had communicated emotions and performed expressively. If induced at all, their musical emotions were a weak representation of similar everyday emotions (as discussed in this chapter). Most often, the performers' engagement with the perceived musical emotion extended only to the recognition and communication of the emotion to the audience, without feeling it to any great extent. This affirms McGill's (2007: 17) assertion that while there is an appealingly romantic notion that musicians experience "rapturous paroxysms or pangs of pain during performance", musicians are advised rather to avoid this subjective state of mind. Pianist D reflects on his conscious and intentional distancing from the perceived musical emotion as:

> Well I don't think one experiences the emotion as such. I think you remove yourself. But the thing is what I think makes an exceptional performance from a good performance is when you engage emotionally in your work *to a certain extent.* (p.3)

The findings of the analysis support Juslin and Timmers' (2010) assertion that the performer's induced emotion does not guarantee that it will successfully be conveyed to an audience. Correlating with Van Zijl and Sloboda's (2011) finding that performers prefer to concentrate on accurately conveying their final musical interpretation to the audience, rather than experience strong personal (music-related) emotions, the findings of the analysis indicate that performers therefore seek reliable methods of achieving this. The findings of the analysis resonate strongly with McGill's (2007) caution that a performer who attempts to feel

the perceived musical emotion in performance in a public act of exhibitionism, hoping to mesmerize the audience into feeling exactly the same way, will be unsuccessful in communicating musical emotion in performance.

That musical emotions can be perceived and communicated but not induced during performance has several advantages. Firstly, it means that performers are able to successfully communicate a broad range of powerful musical emotions (positive and negative) without having to engage with them fully at the time of the performance. For example, raw feelings of joy, grief, anguish, or anger are not easily contained in a performance. Given the range, intensity, and scope of musical emotions usually expressed in a full recital, it would be too emotionally draining for performers to experience all these emotions, and communicate them in an understandable way, while maintaining control of the performance. Secondly, a performer who does not enjoy, or is unable to identify with a particular emotion – prior to and during performance – may still be able to communicate this emotion successfully through manipulation of the musical cues (tempo, dynamics, rubato, etc). The performer's ability to express perceived emotions without experiencing them is strong evidence that performers do not need to experience specific emotions in order to be able to express them. This supports Sloboda's (2005) assertion that performers consciously plan the expression of emotion in performance, rather than relying on emotional engagement which may (or may not) occur during a particular performance. As the oboist Marcel Tabuteau (in McGill, 2007: 17) asks, "I believe to play as you think more than to play as you feel because how about the day you are not feeling so well?"

One interview has particular reference to the studies which address performers' general assumptions towards their experiences in performance (Persson, 2001; Woody, 2000; Lindström et al., 2003; Van Zijl & Sloboda, 2011). Like these performers, Pianist E initially claims that he experienced specific musical emotion during his performances, saying that his induced and perceived emotions were inseparable:

> Well I I I don't really do any distinction between the emotions that I have experienced in the moment of performance, and what I think, or perceive, to be the emotions that are appropriate (p.2).

However, he later contradicts this claim when reflecting on his actual performance experience. On reflection, he articulates that he in fact experienced a more general heightened emotional arousal during the performance, rather than an identification with the precise emotion he perceived in the music. In other words, his *general assumptions* about the nature

of his emotional engagement in performance altered remarkably when he applied them to an actual performance.

> Pianist E: You know I played *March Funerailles* … Funeral March yes, and that's the famous third movement. Do I feel death and pain and all that, and if I don't then what's wrong with me and how can I do that right? Um … I don't know that the emotions that I am experiencing are *that* defined. I don't know if I see the moonlight in my eyes when I play the opening of the first movement of Beethoven. I don't know if it's something that you can really experience one to one with the pain that you have had in your life or the joy or happiness. It is I think perhaps for me this interpretation of emotions in music is very literal *too* literal. It's too direct. (p.14)

The two student pianists who claimed that perceived musical emotions were induced during their performances were, unlike the other six participants, dissatisfied with their performances as they had not performed to the best of their abilities. Unable to achieve or maintain a psychological state of relaxed concentration which enables optimal performance (Juslin, 2009a), the results of the analysis strongly suggest that these participants' induced musical emotions reflected their upset moods, rather than claimed musical emotions. As one of the participants articulates, he "had a good time getting that depressing, dark feeling, because I was feeling that already". Williamon (2004, in Woody & MacPherson, 2010) suggests that performers need to find an emotional state for themselves that enhances the performance. These performers were unable to achieve this optimal state, and as a result, were dominated by genuine feelings of negativity throughout the performances, which they mistook for induced musical emotions.

Several participants suggested reasons other than musical emotions which influenced their heightened emotional state during the performance. For example, one participant cites the repertoire and genre of the piece as a possible trigger for the intensity of his emotional arousal during a performance. Correlating with Impett's (2009) argument that the aesthetics of composition are subject to evolving cultural, individual, and environmental factors, this implies that a work by Haydn which articulates a pre-modern world view, elicits more subdued emotions than a work composed later (from the Romantic period on) where modern subject and subjectivity starts to emerge, inspiring stronger emotions.

One participant attributes her heightened emotional state to images she visualises in response to the music. Her emotional response is then a result of the image, as well as the memory of her emotions when she sees this real image. This supports Juslin's (2011) BREVCEM framework which outlines seven mechanisms through which emotions are induced in music

(thus far only in connection with listener responses). Referred to as visual imagery in the model, this is a process whereby emotional responses are conjured up by the listener in response to specific musical features, such as repetition, melodic, harmonic, and rhythmic elements, or tempi. While it is beyond the scope of this research to investigate the precise mechanisms which account for the performers' emotions, it is significant that some of the mechanisms in Juslin's (2011) model, such as visual imagery and musical expectancy, appear to account for the induction of the performers' emotions (even if the emotions are not powerful).

In contrast to their relatively subdued experiences of specific musical emotions during performance, the performers all appeared to experience induced musical emotions prior to the performance. Their musical responses were then factored into their expressive, interpretative choices made during practice sessions, and later represented in performance. This supports the theoretical approaches to musical emotions (Juslin, 2001, 2003; Gabrielsson, 2001-2002) and empirical studies (Sloboda & Lehmann, 2001; Chaffin et al., 2002, 2006; Van Zijl & Sloboda, 2011) which claim that deliberate, conscious awareness and planned expressiveness account for an expressive performance. The findings of the analysis correlate with McGill's (2007) approach that performers do not simply feel their way around the music, and rely rather on their interpretation and analysis of the musical structure, in order to successfully communicate the music's content.

One participant's description of the integral role his musical emotions play throughout preparation process echoes Van Zijl and Sloboda's (2011) findings that an expressive interpretation, based on a performer's experience of certain emotion, is deliberately and consciously constructed during four stages of preparation. Furthermore, his experiences of perceived and induced emotions – which he claims differ and evolve during preparation – supports Van Zijl and Sloboda's (2011) finding in that the *way* in which performers engage emotionally with music is complex, and changes throughout the preparation period. The cumulative result of all the stages of preparation is then presented as a unique interpretation in the performance.

Van Zijl and Sloboda's (2011) findings suggest that, in order to give a really expressive performance, the performer needs to *re-engage* mentally and emotionally with the perceived musical emotions, a process which brings the performance to life. This research does not support this finding. As discussed earlier, the performers a) seldom engaged with specific

perceived musical emotions during performance, and b) described their performances as alive and expressive despite not engaging with perceived musical emotions. Moreover the process of integrating musical emotions into a musical interpretation is a complex process, one which does not easily compare to a simplistic "re-engagement with an emotion". Two performers provided novel descriptions of the process through which musical emotions encoded in their interpretations "came to life" during performance. To quote one of these performers, "the emotion is already there, in an embryonic state and then when you play, your own sound enhances it and makes it come to life". This quote disputes the idea that performers actively try to re-engage with the musical emotions during performance, suggesting rather that the performance of the interpretation itself – which includes encoded emotions – is sufficient to activate and communicate the musical emotions.

The findings of the analysis suggest therefore that perceived musical emotions, along with many other aspects of musical performance, are encoded in an interpretation prior to the performance, and later represented during performance. This supports the cognitivist position (Gabrielsson, 2001-2002; Hodges & Sebald, 2011) that emotions in music can be perceived without feeling them. It is specifically correlates with the third of Gabrielsson's (2001-2002) four types of relationships (*positive*, *negative*, *no systematic*, *no relation*) between perceived and induced emotions in listeners. Applied to performance experience, *no systematic relationship* accounts for the fact that performers also may remain "emotionally neutral" in response to musical emotions, despite perceiving the emotional expression present in the music. Furthermore, it also affirms the performers' description that they may experience different emotional responses to the musical emotion on different occasions – essentially, they do not always respond precisely the same way to the music they are performing at all times.

This discrepancy between the findings from the current research and Van Zijl and Sloboda's (2011) research can be attributed to the fact that the participants in Van Zijl and Sloboda's research did not perform in an authentic performance context. As discussed in Chapter 2, the data which reflected on the performers' felt emotions during the "performance" was collected during individual lessons – rather than a concert performance – with the performer's teacher. Furthermore, some of the participants in Van Zijl and Sloboda's study did not have a lesson scheduled, resulting in incomplete data collection and analysis of this particular stage of the research (Van Zijl, 2008). As Juslin (2011) writes, the *context* of an event, such as activity,

location, and social condition, is central to the occurrence of *specific* musical emotions. As the context of the performance environment on stage differs unquestionably from the performance environment in a teacher's studio, it follows that performers' emotional experiences will also differ. Thus Van Zijl and Sloboda (2011) could not accurately analyse whether the performers actually did re-engage with the perceived emotions they were attempting to communicate during performance.

Van Zijl and Sloboda (2011) found that performers experienced two kinds of emotions during the construction of a performance: practice-related emotion, such as frustration at not being able to master technical difficulties; and music-related emotions, such as aesthetic delight. The findings of the analysis add to this finding, proposing that performers also experience two kinds of emotions during performance: performance-related emotions (which tend to be negative and potentially destructive to the performance) such as frustration at not being able to express themselves optimally due to performance circumstances, performance anxiety, or performance dissatisfaction; and musical emotions (which are positive and enhance the performer's experience of the performance) such as the engagement, albeit imprecise, with aesthetically pleasing musical emotions.

Apart from fairly extensive research on performance anxiety (see Kenny, 2010), very little literature addresses the range of performance-related emotions experienced by performers. The findings of the analysis suggest that the student performers were significantly more affected by negative performance-related emotions than the professional performers (two of whom did not mention negative performance-related emotions as factoring in their performance emotions). This implies that performers become more adept at managing negative performance-related emotions with experience. According to the professional performers, focusing on other aspects of the performance such as listening attentively, breathing, body awareness, or concentrating on perceived musical emotions helped them to overcome potentially destructive performance-related emotions. As Pianist H elaborates:

> The more experience one gets, the more you learn to let those things go. But there are just some days where it's hard to settle down … and then that's when I find I resort to things like physical stuff … breathing being the big one. And sometimes I'll sit on my bum, or I'll move on the chair, or I'll remind myself of the feeling in my arms, between the shoulder blades, that magic space. That's if things are really difficult. But the other one is then, listen to the sound. Always listen to the sound because that then pulls you back into that space. (p.12)

All the student performers were affected to some degree by the competition. However, only two of the four student performers were negatively affected by the competition. The findings of the analysis suggest that the reasons for their negative experiences was due more to individual personal issues, such as low self-esteem, fear of failure, or ambition, rather than the competition circumstance itself. Scherer (1999, in Sloboda & Juslin, 2010: 75) asserts that a frequent source of emotion in everyday life is the individual's cognitive appraisals of events in relation to subjective goals, intentions, motives, and personal concerns. As Sloboda and Juslin (2010) argue, emotions are therefore not simply explained in terms of objectively defined stimuli (such as a competition), as the stimuli are significant only in relation to how the individual processes them in a specific context. Smith, Maragos and van Dyk (in Kenny, 2010: 426) posit that cognitive appraisal of a music performance context is a significant factor determining the occurrence of performance anxiety. Cognitive appraisal includes assessment of the demands of the performance, the personal resources that can be accessed to meet the demands, and the possible consequences to the musician (Smith, Maragos & van Dyk, in Kenny, 2010: 426). As both student performers who were overwhelmed by negative performance-related emotions (including performance anxiety) had specific goals and personal concerns in the competition, it is probable that they were affected more by their own cognitive appraisals of the competition than by the competitive environment itself. As Kenny (2010: 427) posits, anxious apprehension, the perception that one cannot predict, nor have control over possible future threats and their consequences, is fundamental to the experience of anxiety. This finding has very positive implications for young performers who are generally expected to participate in competitions before establishing a professional career. It implies that the competition context need not play a major role in the success of a performance, if the contestant is able to objectively view the competition as a performance opportunity, rather than a measure of musical achievement. Admittedly competitions are geared to rank performers, but as the two competitors who were unaffected by the competition demonstrated, the competitive factor can be circumvented if viewed objectively and maturely.

One of the research's most significant findings is the value of emotional control in performance. Gellrich (1991, in Juslin & Timmers, 2010) asserts that powerful emotional involvement may lead to muscle tension, with disastrous effects on the performance. The findings of the analysis offer a number of detailed accounts of the destructive effects of uncontrolled emotional engagement in performance. According to the performers,

performances may spiral out of control if they do not sustain strict emotional control of themselves during the performances. The result of excessive or uncontrolled emotional engagement inevitably compromises the performer's concentration, leading to an impeded capacity for listening and self-evaluation. This leads to technical, musical, stylistic or memory error, which in turn undermines self-confidence, inhibits performance expression, and ultimately prevents optimal performance.

Gabrielsson (2010) describes a particular study where performers who became so overwhelmed by their musical emotions were unable to perform adequately, and simply simulated performing. Significantly, the performers emphasized that overwhelming emotional engagement could result from *both* musical and performance-related emotions. Pianist D elaborates on the dangers of losing emotional control, describing how he may forget the music and be unable to perform, if his emotions overpower his cognitive resources:

> With emotion, there's always a certain extent to which it must interfere. If the emotion gets the upper hand above thinking and reasoning and … it's likely to end disastrous because you'll get carried away, you'll forget … then the music (p.3)

An overly emotional performance is viewed in the research as an unprofessional, egotistical indulgence which could prevent the performer from accurately representing the score, or having a meaningful musical experience. This correlates with McGill's (2007: 24) assertion that professionalism in performance distinguishes between artistry – performers' dedication to seeking musical truth as the key to meaningful musical experience, and showmanship – performance as a crude act of public self-indulgence, or posturing, where the performer relies on performance inspiration to produce an arbitrary interpretation. Pianist E articulates profound irritation for this superficial approach:

> You're not performing Chopin or Beethoven. You perform *yourself*, and I think that's a *very* dangerous thing to do, and that I would like to call is the ultimate manifestation of self-indulgence … when you indulge *yourself i*n the performance. And you completely take everything that you can from the music that you create without leaving the … the composer on the table. (p.5-6)

The findings of the analysis suggest that, in order to accurately express the music, the performers therefore strongly emphasized the importance of maintaining strict emotional control of themselves throughout the performance. This affirms Woody and MacPherson's (2010) claim that only through "managing" their emotions during performances are performers able to mentally and physically carry out the performance.

McGill (2007) proposes that performers should consciously distance themselves from overwhelming emotion in order to maintain composure and keep control of the instrument. The findings of the analysis affirm this, indicating that the performers approach emotional control during performance in much the same way as an everyday context. As Pianist G explains, emotional control in a performance context, just like in everyday situations, is desirable in order to facilitate necessary thought processes, which then facilitate appropriate actions. This suggests that the phenomenon of balancing cognitive and emotive processes is not specific to musical contexts.

> When we're faced with a … maybe a dangerous situation, in which we have to act and do something, we automatically don't let our emotions completely take us over … we are thinking. And you very much have to be in that state when you play. (p.9)

The findings of the analysis reveal that the performers tried to find a balance between emotional control and abandon, as extremes of both emotional states were undesirable. Too much control could lead to a 'calculated performance', which was equally as undesirable as an overly emotional performance. Finding the balance was an elusive process, sometimes achieved during performance, sometimes dependent only on the moment. As Pianist F says:

> It depends. Sometimes you control it, and sometimes you let it go, and hope for the best … not to crash and burn. (p.5)

Interestingly, performers may allow themselves slightly more freedom of emotional engagement when performing music which is not technically or musically challenging. In this instance, the performer assumes more of a passive listener role than an active performer role, because even if overwhelmed by strong emotions, the performance would not be negatively affected. Therefore levels of emotional engagement may fluctuate not only within a composition, but also depending on the genre of a composition, as well as in relation to the technical or musical challenges of a work.

The findings of this study are consistent with Gabrielsson and Lindström's (2010) claim that emotional expression is a key aspect of musical expression. As Pianist F says:

> That's the essence of music for me. And it is a language and ah, in order to have the power to reach people, it needs to travel through the flow of emotions. It just cannot be otherwise. (p.5)

However, the findings also support Gabrielsson's (2009) supposition that in addition to the central role emotional expression plays in an expressive performance, music also expresses,

reflects or represents events or situations, motion, dynamic forces, human character, personality, social conditions, and religion.

> Pianist E: Music can express, it can reflect many other things. It can reflect intellect, and mathematical kind of qualities, and architecture, and order, and symmetry.

In order to accurately represent all aspects of musical meaning (emotional and non-emotional) in performance, performers draw on a combination of pianistic skills, such as technical prowess, cultural awareness, and stylistic interpretation, in addition to emotional engagement. Musical expression thus becomes feelingful, embodied engagement with aesthetics, culture, and history. This resonates with Juslin's (2003) statement that the process of interpretation, articulated through the manipulations of the structural cues in the score, is influenced by both internal factors, such as emotions, or wanting to express something personal, and external factors such as the musical style, the structure of the piece, or the composer's intentions. Clarke (1988, 1993) discusses the close relationship between a performer's expression and understanding of musical structure in successfully conveying musical expression to the listener. The relationship between structural and expressive features has been acknowledged in the literature, while the impact of a performer's emotions on performance is still to be established.

5.3 Superordinate theme 2: Performance as a cognitive, emotive, and embodied experience

An unanticipated and surprising finding of the analysis suggests that an intense, dynamic dialogue exists between the performer and the composer during performance. Very little evidence of this relationship between the performer and the composer exists in the literature. Mezzo-soprano Maria Callas (in McGill, 2007: 13) provides some insight into the complex nature of the performer's quest to understand the composer's intentions. She says:

> There's a lot to it – lots of devotion, dedication [and] respect for the composer ... we go by very little [with printed music] and you have to search … It's like reading a book. Many times you read a book but you have to read between the lines too … We have to read what the composer would have wanted: a thousand colours, expressions. It's really not as easy as all that, *if* one really cares that much – and I do. *I do*.

The findings of the analysis resonate with these sentiments, suggesting that cultivating a dialogue with the composer is one of the performer's primary concerns. As McGill (2007) asserts, it is the meticulous analysis of the score which drives the true professional performer to discover what is correct in its performance, and to thereby do justice to the composer's

intentions in the score. Pianist E expresses his strong desire to connect with and truly represent the composer and himself to the audience, as well as the difficult nature of this task:

> *That* is what I'm bringing really, I'm bringing the composer, I'm not bringing myself. … So to have those two [composer and performer]… happening at the same time um, is I think not a given. It's not, it doesn't happen, by itself … it's something that you have to really maintain in every given moment. (p.6)

The findings of the analysis suggest that the dialogue between performer and composer is an *ongoing, creative process*, which the performer cultivates throughout the preparation stages for a performance. According to Chaffin et al. (2002), this preparation process comprises six stages: scouting out the score; section by section; the gray stage; putting it together; polishing; and maintenance. Similarly, Van Zijl and Sloboda (2011) posit that the process of interpretation and construction of expressive performance evolves over four phases: initial exploration of the piece; mastering technical difficulties; constructing an expressive interpretation; and constructing an expressive performance.

The findings of the analysis identify *musical factors* as the initial source of information which indicates composers' expressive intentions to performers. According to Juslin (2009b), musical factors are one of three factors (musical, individual, and situational) which arouse emotion in response to music. Referred to as expressive cues, musical factors are the expressive resources which are embedded in the musical score. They provide the structural characteristics of the music, such as tempo, dynamic levels, timing, intonation, articulation, timbre, vibrato, tone attacks, tone decays, and pauses. The findings of the analysis indicate that performers study the score in detail over a period of time, during which they form an interpretation which represents the composer as accurately as possible through adherence to structural or stylistic indications, as well as its expressive cues (tempi or dynamic markings). This correlates with Chaffin et al.'s (2002; 2006) assertion that expert musicians form their interpretations through three kinds of "performance cues": basic cues, interpretative cues, and expressive cues.

However, accurately representing the composer is not the only factor which motivates the performer. As suggested by Persson (2001), this research found that performers are strongly driven by hedonistic impulses during performance.

> Pianist E: The respect to the composer, to the details, to the music that you bring to the audience … you didn't create that music, you are an intermediate, you are a messenger. I definitely don't want to lose that. On the other hand, I do want to feel fresh, I do want to

> feel new, and I do want to have a glorious experience, an emotional experience … creative experience … every time. (p.9)

Once the composer's intentions have been identified, the performer then begins a process of personalizing these representations through individual musical choices. The findings of the analysis suggest that this process is influenced by a number of *individual* factors which Juslin (2009b) suggests may play a role in emotional responses. These include specifically the performer's experience, personality, musical training, music preference, and current mood. The findings of the analysis suggest that it is this process of personalisation – determined by unique musical and individual factors – which integrates the performer's identity into the composition.

> Pianist G: I find it such an interesting challenge to bring a bit of your own spin or … not your own spin but your own personality … to what the composer has dictated. (p.16)

Van Zijl and Sloboda (2011) propose that performers' musical interpretations are based primarily on their own feelings (i.e. how they thought it should sound), the composer's intentions (perceived in the score), and stylistic observations. This correlates with the present findings, which suggest that performers strive to create interpretations which integrate their musical identities, emotions, and intentions with those of the composer. A unique performer–composer relationship emerges from this process of combining identities through musical choices, developing over many months of practising and performance experience.

> Pianist E: I think the first thing is to play, and play a lot. To perform, and to perform a lot, and not just when you practise. There is that kind of x factor that happens when you are performing a piece. And there is also the process of evolution that happens for most pianists, for most artists, that is … from the moment you heard it for the first time, through reading it, through practising it, through the first performance, and then more, and more, and more performances. (p.6)

Van Zijl and Sloboda (2011) found that performers prefer to concentrate on conveying their final musical interpretation to the audience, rather than experience strong personal (music-related) emotions. Correlating with this, the present findings indicate that performers viewed excessive engagement with their own strong emotions during performance indulgent and undesirable, as overwhelming emotions prevent an effective communication of the composer's intentions. As McGill (2007: 15) puts it, "only after the music has been rationalised can the well-informed musician communicate what is really in the music, not just what he or she may wish were in it". Pianist E eloquently articulates the performers' approach to strong emotions during performances:

> I try to create the experience of performance as genuine as possible to what the composer wrote, with my understanding of it of course. And I think it triggers things in the audience, and I think really *this* is my role. My role is not to cry when I play the Funeral March … or to cry metaphorically speaking. Or to feel incredible cuteness when I play the second movement of Moonlight, you know that Minuet there. I don't think that's my role. I think my goal, at least in that whole experience of … pianist-composer – performance is to … kind of put it on the plate, in the most compelling way. (p.14 -15)

Sometimes discrepancies between perceived musical emotions and the performers' own emotions occurred during preparation. An interesting finding was that student and professional performers differed in their approach to this phenomenon. In the event of a discrepancy, student performers aligned their contrasting emotions with the composer's perceived emotions, in order to accommodate the composer's emotions and create an interpretation which represented both performer and composer identities. Juslin (2001), Persson (1992, in Persson, 2001), and Van Zijl and Sloboda (2011) also found that if the (student) performer's and composer's feelings did not correlate, the performers compromised their feelings to accommodate the composer's emotions. However, the findings of the analysis revealed that some of the professional performers, if they felt their emotions differed from what their perceptions were of the composer's musical intentions, sometimes intentionally favoured their induced emotions over perceived emotions. As Pianist G articulates:

> I do remember making conscious decisions in some repertoire where um … I feel a certain emotion that's associated with something that's happening in the music, that I just can't see any other way, and it goes against, sometimes the opposite, or a little bit different from what the composer has written. And I make the conscious choice to do it my way. And it is emotionally based … it's an emotion that I want to bring off, in myself, and also to the audience, that I really can't see any other way. And so I make the *decision* to do it that way. (p.17)

After the performer–composer union has been created during preparation, the findings of the analysis suggest that it is then represented in performance as a new entity – the stage persona. The stage persona is an independent identity, the product of two musical identities (performer and composer) which is notably separate from each individual identity, and more than the sum of its parts. The research elicited some interesting perspectives on how performers experience the precise nature of the stage persona. The nature of this experience has not been addressed in the literature to the best of my knowledge. Several performers described their stage persona as a dual personality. As the two sides of the stage persona co-exist, yet function so independently of each other, the performers described the extreme duality of the performance experience as schizophrenic.

> Pianist F: I think it's a controlled schizophrenia because your brain basically splits into two different parts, one that is the controller and that checks that everything is being done the way it is supposed to, and the other one just emotes and … feels. They co-exist yes, the controller and the … emotional part. (p.2-3)

One character in the stage persona functions at a *conscious, cognitive level,* and monitors the practical aspects of the music e.g. technical challenges, structural and expressive cues, and memory control. It is described as highly concentrated and controlled, and represents the composer's identity. It is the aspect of the performer which develops with education and experience, and is often referred to as the "professional". The other side of the stage persona functions at an *unconscious, emotive* level. Described as creative, spontaneous, and free to emote, it represents the performer's identity. It evolves with personal development and maturity, rather than training. In other words, it is not an aspect of the performer which can be trained. The performers refer to this part of their performance persona as highly "personal" or their "souls". Maintaining a perfect balance of the conscious (cognitive) and unconscious (emotive) aspects of performance appears to facilitate optimal performance, which is characterized by an altered consciousness.

> Pianist D: It's a *balance* … your ability to balance your cognitive and your subconscious – your emotions. So when you balance all those things the music comes alive for you. Because then … it's like you go to the next level … that Nirvana state. (p.19)

Although it is beyond the scope of this research to discuss expressive gestures, the analysis suggests that several performers experienced embodied emotional expression during their performances. Their experiences of high degrees of emotional arousal were expressed in physical gestures, such as embracing, or hugging, the piano. Whichever energy they experienced flowed directly into the instrument, enhancing the performance expression. The music's emotional energy was transmitted through the performer's gestures into the performing arena, enhancing emotional communication. Some pianists even experienced a degree of sensual pleasure through touching or caressing the piano.

> Pianist H: I when you sit at a piano … I can take it in and it's this sort of *embrace* that you can do here, and it feels like your whole body's just ready to be part of the piano. (p.16)

The findings of the analysis indicated that the student performers were aware of the role their bodies played in the performance to some degree. However, the professional performers, who attributed their physical involvement with the piano as a factor in the sense of "oneness" they felt with the music, described their performances as an embodiment of their musical personas. The performer's experience of the body merging with the music resonates with

Gabrielsson and Lindström-Wik's (in Whaley et al. 2010: 453) referral to quasi-physical reactions in the SEM projects (also referred to by Panzarella (1980, in Gabrielsson, 2010) as motor-sensory ecstasy). This phenomenon will be discussed in more detail in section 5.4.

Thus, the findings of the analysis propose that a performer–composer union, cultivated during preparation stages, lies at the nexus of each musical interpretation. It is the means through which complex cognitive and emotive processes are communicated to the listener. Performers' perception of the cognitive–emotive duality is honed with experience. Maintaining a perfect cognitive–emotive balance is the key to optimal performance, and may lead to performer's experiencing an altered state of consciousness. During optimal performance, the performer–composer union manifests itself as a stage persona. The stage persona is experienced by the performers during performance as an embodied cognitive–emotive experience.

5.4 Superordinate theme 3: Optimal performance experience

In an optimal performance experience, performers perform to the absolute best of their abilities, the result of which is a profoundly satisfying feeling of having reached a goal or fulfilled a dream (Panebianco-Warrens, 2013). According to Bailey and Davidson (in Woody and McPherson, 2010) the nature of a performer's powerful experience during optimal performance includes heightened emotional rewards beyond those of music-making. The findings of the analysis suggest that when performers perform to the best of their abilities, they become so totally absorbed in their performance that they transcend reality, and experience an altered state of consciousness. Maslow (1968, in Gabrielsson, 2010) refers to this kind of experience in everyday life as a peak experience, which he describes as a blissful moment of profound happiness, fulfilment, and transcendent ecstasy (Maslow, in Hodges & Sebald, 2011). The findings of the analysis support Maslow's (1968, in Gabrielsson, 2010) characterization of peak experiences as being characterized by total attention on the object in question, complete absorption in the task of performing, disorientation in time and space, transcendence of ego, and identification or fusion of the perceiver and the perceived. The findings of the analysis also correlate with Gabrielsson and Lindström-Wik's (2003, in Whaley et al., 2009) assertion that peak experiences are characterized by feelings of positivity and powerfulness.

McGill (2007) describes the sensation felt by classical musicians during some performances as so intense that it verges on a sort of ecstasy. The findings of the analysis support this portrayal, suggesting that when fully absorbed in their performances, performers experience feelings of euphoria, profound satisfaction, confidence, freedom, and relaxation. The performer's experience therefore resonates with Panzarella's (1980, in Gabrielsson, 2010) notion of *withdrawal ecstasy*, where listeners' complete absorption in a task leads to a perceptual narrowing so that everything except the object disappears, leaving perfect focus on the object.

In this study, many performers referred to the phenomenon of becoming so completely absorbed in their performances that they transcended reality and experienced an altered state of consciousness as "being in a zone".

> Pianist G: People say you're "in the zone", it's like you're in another state of mind, on another planet almost … it's almost like I'm sitting on a cloud … being supported by a cushion of emotion, of ecstasy. (p.7-8)

The "zone" experience identified by the performers in the current study correlates with Csíkszentmihályi's (1990) psychology of Flow. According to Csíkszentmihályi (1990), Flow is a psychological state characterized by intense focus, creative engagement, and absolute absorption in an activity. It includes both peak experience and performance, although it must be noted that these phenomena are not synonymous (Harmison and Casto, 2012). Flow occurs when an individual's skills and the challenge presented by a particular task are perfectly matched. Csíkszentmihályi (1990) divided the characteristics of Flow into nine dimensions. The findings of the analysis indicate that performers have extremely powerful experiences when they are in the zone. These findings are discussed in relation to Csíkszentmihályi's (1990) nine Flow dimensions in the section below. Some parallels are also drawn to findings of similar peak experiences in listeners from studies by Panzarella (1980, in Gabrielsson, 2010) and Gabrielsson and Lindström-Wik's (Whaley et al., 2009).

The findings of the analysis suggest that performers experience intense concentration when in the zone, to the extent that they may become "one" with the music. This correlates with two of Csíkszentmihályi's (1990) Flow dimensions: *total concentration on the task at hand*, a hallmark of Flow; and *action-awareness mergence*, where intense concentration enables individuals to focus solely on a specific task to the degree that the individual loses awareness of everything external to the activity itself. Panzarella (1980, in Gabrielsson, 2010) refers to this fusion between the medium and the individual in a peak listening experience as *fusion-*

emotion ecstasy. Gabrielsson and Lindström-Wik (Whaley et al., 2009) categorize this phenomenon as a *physical* aspect of SEM in music.

The findings of the analysis indicate that the performers interacted with the audience to some degree when in the zone. This is in line with Csíkszentmihályi's (1990) dimension, *unambiguous feedback*, where individuals receive feedback from external sources which direct their performance success.

> Pianist H: And it's self-fulfilling, it's a *deep* sense of connection with the music, and with the world, and with the audience. Because when you get into that good space … and I felt a lot of it with the audience tonight … I thought we're all doing this together. Because I might be making the notes come out of the piano, but they're listening, they're completing this process, and it's … aah fantastic. (p.13)

The findings of the analysis suggest that during a zone experience, performers no longer try to control their performances. This supports Csíkszentmihályi's (1990) dimension, the *paradox of control*, where the sense of worry about losing control typical in many situations in everyday life, ceases to concern the individual. The findings of the analysis also suggest that performers experience profound feelings of calmness and being in control in the zone. Sometimes they experience strong physical responses, such as goose bumps, which resonates with Panzarella's (1980, in Gabrielsson, 2010) *motor-sensory ecstasy* (experiences of physical responses such as tears, altered heart rhythms, chills).

> Pianist G: When I hit the zone, I feel very calm. I know my heart, whereas it might race before I go on stage from nerves, my heart is noticeably *not* racing, it's noticeably calm. … I sometimes get goose bumps um, from just the sound and just the emotions that are drummed up from what I'm hearing. (p.7)

In addition, the findings of the analysis indicate that performers experience profound bliss when in the zone. This resonates with Csíkszentmihályi's (1990) description of an *autotelic experience*, an experience which is so enjoyable and intrinsically rewarding that it is undertaken simply for the sake of the activity. Similarly, the findings of the analysis support Whaley et al.'s (2009) assertion that the strong and distinctive perceptual, physical, cognitive, and emotive components of a peak experience are intensely enjoyable to the person. Gabrielsson and Lindström-Wik (Whaley et al., 2010) classify this feeling of bliss as a *positive emotional* attribute of SEM, while Panzarella (1980, in Gabrielsson, 2010) refers to listeners' desire to engage further with an artistic medium in a peak experience as *renewal ecstasy*.

> Pianist H: And I just have fun you know, which sounds very superficial, but it's not … it takes you back to that kind of blissful state of … all I've ever wanted to do is play the piano, and life is perfect when you can do that. (p.13)

The findings of the analysis identify that performers transcend reality in the zone, and may lose track of time and self-awareness to such a degree that they experience their performance as an audience member, rather than as the performer. The performer's disorientation of time and self-awareness resonates with two of Csíkszentmihályi's (1990) Flow dimensions: *time transformation*, where time appears to pass either very quickly or very slowly; and *loss of self-consciousness*, where personal boundaries dissolve, and there is a loss of consciousness of self, resulting in freedom from negative self-doubt or self-concern. Gabrielsson and Lindström-Wik (Gabrielsson, 2010) categorize the performer's notion of an out of body experience as a *physical* attribute of a SEM, and categorize the loss of time or self-awareness as a *cognitive* attribute of a SEM.

> Pianist B: It's very relaxed, but it's as if you're watching your hands … as if you are enjoying the music with the audience, and not really doing anything. You're hearing it, but at the same time you're controlling it too. And you're hearing wonderful things happen, but you're not controlling it, you know what I mean … it just happens somehow. (p.8)

According to Csíkszentmihályi (1990), the loss of self-awareness can lead to a feeling of self-transcendence and a sense of being part of something greater than the self. The findings of the analysis suggest that a transcendence of reality, and altered consciousness, is strongly desired by performers, as it is a musical dimension in which they feel inspired to perform with enhanced creativity.

The findings of the analysis suggest that, when in the zone, performers are not conscious of cognitive and emotive processes. They described the zone more as transcending cognitive, emotive, and physical awareness. The music flows effortlessly and the performance appears to run on "autopilot". As Gabrielsson (2010) states, achieving Flow in musical performance involves mastering a difficult piece in a fully concentrated yet effortless involvement. Pianist D describes this state as an effortless, yet highly creative transcendent reality:

> You're *experiencing* the notes as you play them. Not necessarily *thinking* of them but letting them flow from you. (p.16) … So I would say it advances to the next level, where you *forget* the notes and you *forget* the evolution of the music, and it's like you're on a clean sheet. And it's like the composer hands the page to you and says … now *you* give the dynamics, *you* give the score indications. (p.21)

Any kind of error however instantly disrupts this transcendent reality, as it requires the performer to start "thinking" in order to correct the error and continue the performance. Therefore error disrupts the cognitive–emotive–motor balance, and the performance ceases to flow effortlessly.

> Pianist A: And, when you are in the zone um … everything sort of … comes on its own. It flows and when you suddenly make a mistake, or something sudden happens, you are shocked back into reality. (p.17)

The findings of the analysis propose that performers feel musically inspired, and able to fulfil their creative potential in the zone. Their sense of transcending reality, sometimes described as a spiritual experience, supports Maslow's (1968, in Hodges & Sebald, 2011) theory that a peak experience produces a heightened sense of an individual's physical and "existential" state of being, a sort of positive hyper self-awareness. The analysis suggests that this existential self-realisation is intensely enjoyable and satisfying to the performers, and is a primary incentive to perform. In SEM, Gabrielsson and Lindström-Wik (Gabrielsson, 2010) refer to this as existential and transcendental aspects, and include reflections on human life and existence, cosmic experience, experience of other worlds, religious visions, and encounters with the divine as aspects of the experience.

> Pianist H: I'm a complete atheist right, but I think music is a sort of spiritual thing, and we all get to a space where we know we're relating, ok? And it's that space which is a spiritual space, it's the place of … extreme integrity to your particular discipline … and it's about being nakedly honest, so that it's like you're prepared to sort of eviscerate yourself and say … here's my heart. This is the relationship between you and your discipline where … you can sort of face your honesty, face your vulnerability, and take risks. You know, you can play something and say … I don't know where it's going to take me … in other words, you're moving out of your inner safe space but your guide, if you like in a way, is integrity. (p.6-7)

According to Swann et al. (2012: 808), the intersection of peak performance and peak experience is the crux of Flow. However, little is known about the factors which may instigate, maintain, prevent or interrupt Flow. The findings of the analysis elicited a number of insider perspectives on these factors, which are discussed in the next section.

Whaley et al. (2010) assert that Flow experiences result when an individual's skills and the challenge presented are perfectly matched, unlike peak experiences which are not dependent on skills or pedagogy. The findings of the analysis identified that Flow experiences in performance do not automatically arise, and are dependent on specific factors, such as meticulous musical preparation prior to the performance, emotional control during the performance, and powerful concentration during the performance. As McGill (2007)

observes, feelings are communicated to the audience through the performer's strict discipline and diligence exercised on stage. This suggests that performers experience Flow, rather than peak experiences, in performance.

> Pianist D: And that evolution of the music and getting into the zone… it doesn't evolve, you have to *get into* the zone, a piece doesn't always necessarily *start* in the zone. Ok so it's … whether you play well. (p.21)

The findings of the analysis suggest that Flow is not necessarily sustained throughout a performance. Performers are susceptible to disruptive factors which arise mainly as a result of emotional interference: performance-specific emotions, such as performance anxiety, or musical emotions, such as overindulgence in musical emotions.

> Pianist B: There are moments of sort of mental interruption, *conscious* interruption for me … But it's usually for a split second onstage, you sort of slip out of that zone for a split second, but you go right back. (p.10)

These disruptive factors may impair concentration to such a degree that performers lose the cognitive–emotive balance which sustains Flow. However, performers use different methods to re-enter the zone, such as focusing more on cognitive, emotive, or physical aspects of the performance. To the best of my knowledge there is no existing literature with which this empirical data can be compared.

> Pianist G: I have developed the skill of being able to consciously enter the zone, I can consciously check out … and that's muscle memory. You allow yourself to check out and go on autopilot, and rely only on muscle memory. (p.12)

The findings of the analysis suggest that, even if performers are primed to have a Flow experience (through meticulous preparation, emotional control, and concentration), performance-related factors beyond their control (e.g. an unresponsive instrument, audience distractions, or unpleasant temperatures) may still prevent Flow from occurring. Significantly, all the professional performers managed to overcome inhibiting performance-related factors and still achieve Flow, while two of the student performers did not. This suggests that professional experience plays an active role in achieving Flow, as professional performers have learned how to manage these disturbing factors.

> Pianist F: The disturbing elements did fight harder to get me out of that state but I don't think they succeeded. I had to fight harder. The concentration had to be deeper tonight, to really shut everything else out. (p.8)

Despite these facilitating factors which are associated with the performer's input, the analysis suggests that there is no guarantee of a Flow experience. This resonates with Whaley et al.'s

(2009) assertion that a peak experience is unpredictable, non-volitional, and cannot be generated. However, the data analysis suggests that while the performer's experience of Flow has distinct parallels with peak experience, there are some appreciable differences. This research elicits some elegant descriptions of performers' experiences of Flow, and proposes that musical Flow can be generated and predicted to a degree, which implies that it is not entirely non-volitional.

5.5 Summary

The discussion of the analysis presents some significant insider perspectives on performers' experienced emotions during performance, describing the nature of optimal performance as a cognitive, emotive, and embodied experience. Performers emphasize that while musical and performance-related emotions are at play during performance, it is a performance priority to carefully manage these emotions, as uncontrolled emotions impact negatively on a performance. The performers describe their own engagement with emotions during performance as irrelevant to their performance intention – successfully conveying the score to the audience – and the success of the performance.

The findings of the analysis propose that a performer–composer union which is established prior to performance accounts for the performer's unique interpretation of a score. The interpretation is based on a cognitive–emotive duality which manifests itself as the performer's stage persona in performance. The stage persona is experienced by the performers during performance as an embodied cognitive–emotive experience.

The findings of the analysis strongly suggest that the performer's experience of heightened emotional engagement during performance is synonymous with a state of Flow rather than an emotional response to music. An appropriate emotional state may facilitate or hinder Flow before its onset, but emotion does not play a further role in Flow per se. The hallmark of the heightened engagement experienced during musical Flow is intense focus and concentration, disorientation in time and space, transcendence of ego, and identification of fusion between the perceiver and the perceived (Maslow, in Gabrielsson, 2010). Emotional elation is therefore a by-product of Flow, rather than a determining factor. A heightened sense of physical and existential state of being describes the performer's experience during performance.

Chapter 6
Summary and conclusions

6.1 Introduction

The research set out to explore the role of pianists' emotions during a solo recital. Chapter 1 provided an introduction to the research, and introduced the background, main aims, key concepts and definitions relevant to the research, and the research questions. Chapter 2 provided a thorough overview of the current literature relating to emotion (general and musical), expression, and performers' experience of emotions before and during performance. Chapter 3 explained the methodological procedures followed in order to interrogate the research questions. Chapter 4 presented a detailed analysis of the research findings. Chapter 5 discussed these findings in relation to the literature. Chapter 6 summarizes and presents the conclusions of the research. The main research question and the six sub-components of the research question are addressed systematically in this chapter.

6.2 Addressing the research questions

The main research question is: to what extent do pianists emotionally engage with the music they are performing during a solo recital? The six sub-questions of the main research question will be addressed before the main research question is discussed.

6.2.1 What kinds of emotions are performers likely to experience during performance?

The current research identifies that performers experienced a range of emotions during performance. These emotions are grouped into two categories: musical emotions which arose in response to the music being performed, and performance-related emotions which arose as a result of the performance context rather than the emotional essence of the music. Everyday emotions provide the emotional palette for these responses. Performers engage with aspects of these categories of emotions throughout their performances.

Musical emotions are divided into two categories: perceived (identified but not felt) and induced (identified and felt) emotions (Garbrielsson, 2001-2002). The performers usually perceived the musical emotions they wished to express during their performances as they

were embedded in their musical interpretations. However, these perceived emotions were not induced in the performers during the performance to any significant degree. In a performance context, musical emotions differ profoundly from everyday emotions in intensity, directness, definition, complexity, and scope. Musical emotions are therefore understood to be a complex manifestation of everyday emotions, rather than the raw essence of the emotion. Performers sometimes engaged with the musical manifestation of the everyday emotion during performance to some degree. However, their engagement with an induced musical emotion during performance did not resemble their engagement with a similar emotion in an everyday context. Applying Gabrielsson's (2001-2002) suggestion that perceived and induced emotions are not opposite extremes of a continuum, performers' musical emotions can be viewed as occurring more as an emotion-free experience than an intense emotional experience.

New musical emotions were not experienced during performance as the performers had had prior experience of these emotions during preparation stages. During preparation stages, musical emotions were perceived, induced, and integrated into their musical interpretations. Therefore, musical emotions were anticipated by the performer, perceived, occasionally induced to a small degree, and communicated to the audience.

Most performers experienced a second category of emotions, performance-related emotions, which occurred at the same time as engaging with perceived or induced musical emotions. These emotions were triggered by specific events or circumstances which related to the performance context, such as a disruptive audience, poor instrument, and extreme temperatures. They included emotions such as performance anxiety, self-doubt, frustration, dissatisfaction, and anger, amongst others. Performance-related emotions differed from musical emotions in that they are unpredictable, and potentially disruptive to the performance. Described as negative and capable of preventing performers from fully engaging in a performance, these emotions resembled everyday emotions in intensity and directness. Performers could, however, prevent these emotions from impacting negatively on a performance in a number of ways, such as diverting attention to positive musical aspects of the performance, increasing concentration, breathing, focusing on body awareness, or listening. The more experienced professional performers tended to manage these emotions better than student performers, indicating that contending with performance-related emotions is a skill which is acquired with experience. Finally, the competition circumstances did not

contribute significantly to performance-related emotions, and rather highlighted that maturity and healthy musical motivation play a significant role in handling performance-related emotions.

6.2.2 What significance do professional and student pianists attribute to the expression of emotion in a performance?

The student and professional performers understood emotion to be a core element of musical experience, and therefore considered the expression of emotion a fundamental aspect of performance. They were driven by a healthy degree of hedonism in performance, but also took great pains to communicate musical emotions to the audience to the best of their abilities. Meticulous care was taken to grasp a composer's emotional intentions during preparation for performance. These perceived intentions were assimilated into the interpretation, and performers strove to communicate these intentions as accurately as possible to the audience.

However, all student and professional performers contended that while emotion is the essence of much of music's meaning, it is not the only aspect of musical expression they wished to express to an audience. Other aspects of expressive performance, such as sound effects, tonal colours, or virtuosity, took precedence over emotional expression at times. In these instances, neither the audience, nor they themselves, were concerned with emotional expression, and therefore it was not prioritized.

6.2.3 Is it possible to give an expressive performance without engaging emotionally with the music?

The majority of the performers did not recall engaging with specific perceived musical emotions during their performances. Yet they described their performances as emotionally expressive. The performers' engagement with musical emotions involved perceiving an emotion, and then communicating it to the audience through a carefully constructed interpretation. Performers felt that engaging with emotions during performance did not guarantee that they would be able to successfully express them to the audience. They therefore intentionally distanced themselves from the musical emotion in order to successfully convey their musical interpretation of the emotion. Therefore, the research shows that it is possible to give an expressive performance without engaging emotionally with specific emotions.

There are a number of noteworthy advantages of this finding. Firstly, performers are able to communicate a broad range of powerful emotions (positive and negative) in quick succession of each other during performance. If performers needed to engage emotionally with a variety of powerful emotions during performance, they would become emotionally drained in a very short period of time. This in turn would impact on their stamina during the performance, preventing them from completing a solo recital of classical repertoire, which lasts roughly 70 minutes. Secondly, they were able to successfully communicate emotions with which they did not necessarily identify e.g. madness, or which they did not enjoy e.g. anger. The research indicates therefore that performers consciously planned the expression of emotion in performance, and did not rely on emotional engagement which may (or may not) occur during performance.

6.2.4 Should performers attempt to control their emotions during performance?

Performers approached emotional control in a performance context in much the same way as in an everyday context, where overpowering emotions may restrict cognitive thought and action. Overpowering emotions were not viewed as conducive to optimal musical performance. Student and professional performers emphasized the importance of maintaining strict emotional control throughout a performance. Powerful emotional involvement with either positive musical emotion (e.g. passion) or negative performance-related emotions (e.g. frustration) could overwhelm a performer, leading to a loss of control of the performance. This then compromises the performer's concentration and impedes the ability to listen. When overwhelmed by emotions, performers make technical, musical, stylistic or memory errors, which undermine self-confidence and inhibit performance expression. Six of the eight participants maintained emotional control and enjoyed optimal performance experiences. Two (student) performers were overwhelmed by performance-related emotions, did not enjoy their performances, and – from their perspectives – therefore did not achieve optimal performance.

A further danger of indulging in strong emotions during performance is that the performer may disengage from the performer–composer dialogue. The performance then degenerates into superficial showmanship with little artistic merit. On the other hand, the performers cautioned against too much emotional control, as this could result in a cold, calculated performance. The performers therefore attempted to cultivate a careful balance between

emotional control and abandon during performance – a challenging but ultimately rewarding process.

6.2.5 How is emotion expressed during performance?

Perceived musical emotion is expressed to the audience by the performer through a carefully constructed interpretation. The research suggests that creating a musical interpretation is a highly complex process, and provides some insights into the stages of this process from the performers' perspectives. Initially, the performers study the score's structural, stylistic, technical, and expressive cues over an extended period of time in an attempt to identify the composers' intentions. During this time, they engage with perceived musical emotions in the score at a profound level, frequently experiencing strong musical emotions. Through careful manipulations of the expressive cues in the music, based on their perceived and induced emotions, the performers create a personalized representation of their perceptions of the composers' intentions. This creates a unique interpretation of the score, an integration of the performer's musical identity with the composer's identity. This integration is referred to in the research as a performer–composer union. Performers express the perceived musical emotions and their own integrated emotions through their interpretations.

6.2.6 Are performers emotionally engaged during an optimal performance?

During optimal performance, the performer–composer union, which is represented in the interpretation, manifests itself as an independent entity in performance. Referred to in the research as the stage persona, this entity is described by the performers as a dual personality as it simultaneously performs two entirely separate functions: a conscious, cognitive, concentrated monitoring of the practical aspects of the music (technical challenges, structural and expressive cues, and memory control) – a representation of the composer's identity; and an unconscious, emotive creative force which facilitates spontaneous and free expression in the moment – a representation of the performer's identity.

Maintaining a perfect balance of the conscious (cognitive) and unconscious (emotive) aspects of performance usually facilitated optimal performance, which the performers described as characterized by heightened emotional engagement. The nature of their heightened emotional engagement was often described as feelings of bliss, elation, or euphoria. However, their heightened emotional engagement was not related to specific musical emotions, but resulted rather from complete absorption in the task of performing, intense concentration, and

associated with an altered state of consciousness. This is synonymous with a state of Flow (Csíkszentmihályi, 1990).

6.3 Answering the main research question: to what extent do pianists emotionally engage with the music they are performing during a solo recital?

The findings of the current research suggest that performers do not engage emotionally with musical emotions to any significant degree during performance. The essence of the performers' emotional responses to perceived musical emotions is represented to the audience in a carefully constructed interpretation. The heightened emotional engagement, which characterizes an optimal performance, is synonymous with a state of Flow rather than an identification or engagement with musical emotions.

6.4 Limitations of the study

The research provides some initial insights into the performer's experience of emotions during performance from the performer's perspective. A number of limitations became evident during the course of the research.

Firstly, the research focused on the emotions experienced by pianists playing a solo recital. However, the sample of participants consisted solely of pianists, and therefore does not represent the experiences of all performers (instrumentalists and vocalists). Further research of a more diverse body of performers is needed to ascertain whether the findings relate specifically to pianists, or whether parallels could be drawn with other kinds of performer experiences.

Secondly, the size of the participant sample was small (eight participants) and therefore does not represent generalized findings. The findings need to be explored further with a larger number of participants.

Thirdly, as this research was exploratory, it generated a large body of data, not all of which could be analyzed in great detail. For example, the extent of the psychological impact on the student performer of being eliminated from a competition, and then reinstated, could be explored as a case study.

Fourthly, this study did not consider musical performance in genres other than Classical music, or in performance contexts less bound by the need to remain within the dictates of the written score.

Fifthly, it may have been advantageous to conduct interviews following dress rehearsals to find out whether, or in which ways, an audience might have influenced perceived emotionality during performance. This was unfortunately not possible in this study mainly because the performers live in a number of different cities preventing accessibility. Interviewing Also, the competition organizer was insistant that the student performers should not be approached by me prior to their performances.

6.5 Recommendations for future research

Firstly, future research could explore the emotional engagement of pianists playing in an ensemble of two or more players. It would be interesting to discover whether pianists experience the same kind of emotional engagement when performing in an ensemble, for example, as an accompanist, or member of a chamber group consisting of two or more musicians.

Secondly, the research only briefly touched on the degree to which playing from memory affected the participants' performance experiences. As many performers, pianists, instrumentalists, and singers perform from scores, it might be interesting to compare how a performance from memory compares to a performance from a score. This could be explored using two performances – one from memory, one with the score – of one piece by the same performer.

Thirdly, the study set out to explore the extent to which performers engage with emotions during performance. The interview questions were therefore designed to illicit as much information on this topic as possible. As the interviews progressed however, it became apparent that all the performers experienced a state of altered consciousness during performance, synonymous with Csíkszentmihályi's (1992) theory of Flow. This phenomenon was not anticipated when the semi-structured questionnaire was designed, and specific questions exploring the performer's experience of Flow were therefore not included in the questionnaire. Due to the open ended, semi-structured method of IPA interviews, it was possible to explore this dimension of the performers' experiences in addition to musical emotions. Questions such as "Were you aware of this change in your consciousness during

performance?" and "How would you describe the experience of performing when experiencing altered consciousness?" amongst others were discussed in depth during the interviews. This yielded a great deal of data pertaining specifically to being in a "zone" when performing, and prompted me to research music and consciousness in more depth in the literature, which was subsequently added to the literature review. It may have been useful to design a few more semi-structured interview questions prior to the interviews in order to explore this topic further. However, this was not the original intention of the research. Future research could build on the research findings which support the notion that altered consciousness in music performance. Future research could expand beyond musicians' consciousness, and explore the phenomenon of Flow in performwers involved in music-related activities, such as dance, ice-skating or fitness.

Finally, significant advances in technological methods which measure and record electrical activity in the brain, such as electroencephalogram (EEG), have been made over the last decade. It would be very interesting to measure performers' emotional responses during performance with the use of an EEG, and correlate these results with performers' self-reports of their performances (as was done in this study). The use of electrodes (used to measure brain activity in an EEG) during a performance poses some practical and aesthetic challenges to the performance. However, the results of such a study might contribute significant scientific data to the current research of performers' emotions, which has only been researched from a psychological viewpoint thus far in the literature.

6.6 Conclusions

In conclusion, the research suggests that performers may experience a range of intensely powerful emotions during performance. However, these emotions bear little relation to the diverse musical emotions represented in the performance, and occur rather as a result of the act of performing – often measured by the performer's perspective on the success of the performance. In optimal performance, the non-specific, heightened state of emotional engagement experienced by performers indicates a state of Flow, and is characterized by a blissful sense of transcended reality and altered consciousness. Performers work exceptionally hard to present their interpretations of a musical score to an audience, often contending with disturbing performance-related factors (and emotions) which threaten to thwart their musical attempts. The successful delivery of an interpretation which will move the audience is the performer's main priority, rather than a profound personal experience of

the musical emotions. As McGill (2007) puts it, performers present the music and the audience feels it.

Daniel Barenboim, the internationally acclaimed pianist and conductor, asserts that it is the sound which reaches the listener that matters, not what the performer is feeling (Juslin & Timmers, 2010: 478). Similarly McGill (2007: 17) asserts that "good, bad or indifferent, the performer's feelings are incidental". This implies that the performer's emotions – present or absent, positive or negative, musical or non-musical – play no role in the performance. The research partly supports this assertion, as the performers certainly advocated maintaining strict emotional control in order to perform well enough to move the audience. However, the performers' assertion strongly implies that what the performer is feeling really does matter, in so far as uncontrolled emotions (musical and performance-related) will interfere with a performer's ability to perform to the best of his/her ability, the quality of the performance, and therefore the sound which reaches the audience's ears. This would therefore seem to dispute Barenboim's statement, which is based on the assumption, firstly, that performers are not influenced by emotions other than musical emotions during performance, and secondly, that performers have always got their emotions – musical and performance-related – under control.

However, the research does suggest that, when carefully managed, the performer's musical emotions do not play a significant role at all in the successful communication of emotions. Performers may feel a euphoric "high" when performing, but their actual engagement with musical emotions during performance – perceived or induced – is unrelated to this phenomenon. Just as the professional magician knows the tricks of the trade in stagecraft which create marvelous illusion in the mind of the audience (McGill, 2007), so the performing musician knows that there is no magic in creating the kind of musical performance which has the emotional power to move the audience.

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Addendum A: Questionnaire

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Questionnaire: general questions about the concepts "musical emotion" and "emotionally expressive performance".

1. What do you understand by the term "musical emotion"?

   _____

   _____

   _____

   _____

2. How would you describe an "emotionally expressive" performance?

   _____

   _____

   _____

   _____

3. How do your felt emotions (if any) relate to the emotions you perceive in the music during a performance?

   _____

   _____

   _____

   _____

4. What role do your felt emotions play in your performance, or specifically, an "emotionally expressive" performance?

   _____

   _____

   _____

   _____

5. Does the performer's intended expressed emotion result in a more expressive performance, or could expressive playing be the result of something other than emotion?

_____

_____

_____

_____

6. Do you generally experience felt emotions during a performance? If so, how do your felt emotions relate to the expected score indication?

_____

_____

_____

_____

7. Is it possible, in your opinion, to give an emotionally expressive performance without engaging emotionally with the music during the performance?

_____

_____

_____

_____

8. While you are performing, do you aim to create a performance that reflects your felt emotions? Or do you rather simply follow the expressive indications in the score e.g. dolce, maestoso etc?

_____

_____

_____

_____

9. Do you think a performance needs to express emotions in order for it to be expressive? Or could some music be expressive of something other than emotion?

_____

_____

_____

_____

10. Are there any other factors e.g. playing from memory or the performance environment which contribute significantly to an expressive performance?

_____

_____

_____

_____

Addendum B: Interview Schedule

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PRETORIA, 0002, SOUTH AFRICA

Guide for qualitative, semi-structured interviews with pianists after performances.

1. Was your performance today, in your opinion, an emotionally expressive performance, as described by you in the questionnaire you completed?

2. Were you satisfied that you played as expressively as you intended *throughout* the entire performance? Or were some pieces more expressive than others?

3. Did you experience any emotions during the performance? Do you think these emotions, or lack thereof, played a significant role in your performance?

4. Can you describe any factors which may have contributed to the extent of your engagement with the music you performed today e.g. performance anxiety, confidence, rapport with audience, a responsive piano or any other factors?

5. Obviously there are pieces and/or passages that required more expression than others. During these passages, did you:

   a) Consciously try to "feel" an emotion when performing them, or were you experiencing an emotion without attempting to induce an emotion?

   b) Consciously think about technical aspects of playing e.g. trying to keep a steady pulse, controlling difficult finger work, thinking about the pedalling, balancing chords or melody versus accompaniment, or any other technical aspect of the performance?

   c) Consciously think about musical aspects of playing e.g. manipulating nuances of timing (e.g. rubato or phrase endings), dynamic contrasts, expressive indications (e.g. dolce, maestoso) or any other musical aspect of the performance?

Addendum C1: Letter of consent (students)

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

FACULTY OF HUMANITIES

DEPARTMENT of MUSIC

TEL (012) 420-3747 (*Secretary*)

FAX (012) 420-2248

PRETORIA, 0002, SOUTH AFRICA

Dear Participant in the 4th UNISA National Piano Competition 2011

I, Ms Catherine Foxcroft, would like you to take part in a research project entitled *Exploring the role of South African pianists' emotional engagement with music in a performance*. The research project forms part of the requirements for the DMus degree, for which I am currently registered at the University of Pretoria. The aim of the study is to find out how pianists experience emotions when performing, and whether this plays a role in delivering an emotionally expressive performance. Most research on music and emotion has focused on the listener's perspective. This research will explore the phenomenon from the performer's perspective.

The research project aims to explore the extent to which pianists emotionally engage with the music they are performing during a solo 60 – 70 minute recital. The data will be collected in two phases. In the first phase, you will be asked to complete a short questionnaire which is attached to this email. The questionnaire addresses general questions relating to your perspective on musical emotion and an emotionally expressive performance. As the research is focusing on 60 – 70 minute recitals, you will only be required to participate in phase two of the research project should you be selected to perform in the recital round of the competition. The second part will entail participating in a semi-structured interview with me directly after your recital. The interview will relate directly to your experience of emotional engagement with the music which you have just performed. The interview will be recorded. It should not take more than 45 minutes of your time.

Your participation in the study is voluntary and you are free to withdraw at any stage. Your anonymity is ensured. Data collected will be used for research academic purposes only and the information will be safely stored at the University of Pretoria, Department of Music for a period of 15 years, in compliance with the ethical guidelines of the university. It will be possible, however, for you to receive a transcript of your interview. No financial benefits will be involved. 2 Should you agree to take part in the study, please complete the informed consent form attached. Please email the completed consent form and questionnaire to c.foxcroft@ru.ac.za or fax them to 046 622 7111.

Many thanks

Ms Catherine Foxcroft

Supervisor: Dr Clorinda Panebianco-Warrens

Addendum C2: Letter of consent (professionals)

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

FACULTY OF HUMANITIES

DEPARTMENT of MUSIC

TEL (012) 420-3747 (*Secretary*)

FAX (012) 420-2248

PRETORIA, 0002, SOUTH AFRICA

Dear Pianist

I, Ms Catherine Foxcroft, would like you to take part in a research project entitled *Exploring the role of South African pianists' emotional engagement with music in a performance*. The research project forms part of the requirements for the DMus degree, for which I am currently registered at the University of Pretoria. The aim of the study is to find out how pianists experience emotions when performing, and whether this plays a role in delivering an emotionally expressive performance. Most research on music and emotion has focused on the listener's perspective. This research will explore the phenomenon from the performer's perspective.

The research project aims to explore the extent to which pianists emotionally engage with the music they are performing during a solo 60 – 70 minute recital. In order to participate in the research, you will be required to perform a solo recital of this duration. The data will be collected in two phases. In the first phase, you will be asked to complete a short questionnaire which is attached to this email. The questionnaire addresses general questions relating to your perspective on musical emotion and an emotionally expressive performance. The second part will entail participating in a semi-structured interview with me directly after your recital. Please inform me of your intended recital date, venue and time so that I can travel to the venue to interview you. The interview will relate directly to your experience of emotional engagement with the music which you have just performed. The interview will be recorded. It should not take more than 45 minutes of your time.

Your participation in the study is voluntary and you are free to withdraw at any stage. Your anonymity is ensured. Data collected will be used for research academic purposes only and the information will be safely stored at the University of Pretoria Department of Music for a period of 15 years, in compliance with the ethical guidelines of the university. It will be possible, however, for you to receive a transcript of your interview. No financial benefits will be involved.

Should you agree to take part in the study, please complete the informed consent form attached. Please email the completed consent form and questionnaire to c.foxcroft@ru.ac.za or fax them to 046 622 7111.

Many thanks

Ms Catherine Foxcroft

Supervisor: Dr Clorinda Panebianco-Warrens

Addendum D: Letter of permission from UNISA

Ms Catherine Foxcroft

Rhodes University

Grahamstown

17 February 2011

Dear Ms Foxcroft

4th Unisa National Piano Competition 2011

Permission is granted allowing you to conduct interviews with the semi-finalists of the abovementioned event scheduled from 9- 16 July 2011 in the ZK Matthews Great Hall on the Unisa Muckleneuk Campus on condition that you secure prior written permission from the semi-finalists concerned and that the interviews will be confidential.

I have taken note that these interviews form part of research for the thesis you are writing for a DMus degree at the University of Pretoria.

I request you kindly not to disturb the competitors **before** their performances in the competition.

Sincerely

John Roos

Artistic Director: Unisa National and International Music Competitions

Addendum E: Numeration chart

Superordinate themes	Subordinate themes	A	B	C	D	E	F	G	H
1. Performer's emotions in performance	1a. Musical versus everyday	Yes	No	No	No	Yes	No	Yes	Yes
	2. Perceived vs induced emotions	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	3. Prior experience of perceived musical emotions	No	Yes	Yes	Yes	Yes	Yes	No	Yes
	4. Performance-related emotions	Yes	Yes	Yes	Yes	No	Yes	No	Yes
	5. Emotional control	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
	6. Other aspects of expressive performance	Yes	No	No	No	Yes	Yes	Yes	No
2. Performance as a cognitive, emotive, and embodied experience	1. Performer–composer relationship	No	Yes	Yes	Yes	Yes	Yes	Yes	Yes
	2. Cognitive–emotive duality	Yes	No	No	Yes	Yes	Yes	Yes	No
	3. Embodied performance	Yes	Yes	No	Yes	No	Yes	Yes	Yes
3. Optimal performance	1. Defining the zone	Yes	Yes	No	Yes	Yes	Yes	Yes	Yes
	2. Flow factors	Yes	Yes	Yes	Yes	No	Yes	Yes	Yes

Addendum F: Extended master table of themes

1. Superordinate theme 1: Focus on the performers' experienced emotions

Subordinate theme 1: Musical versus everyday emotions

Pianist A: In my daily life I feel emotions quite strongly depending on the situation, but in the music it's a whole different way of being. (p.17)

Pianist E: I don't know if it's something that you can really experience one to one with the pain that you have had in your life or the joy or happiness (p.14). I think it's just like you're watching yourself in the mirror and the mirror is a little opaque. It's not a complete one to one … a copy of reality. (p.15)

Pianist G: I can't *possibly* compare it to the pain that I feel when I've had relationships break up. I know my emotions are so much more heightened in those non-musical situations … pretty much totally different from my everyday emotions. (p.21)

Pianist H: I feel lots of things but it's not anything that I can name in that tangible sad, happy etc. way. (p.2)

Subordinate theme 2: Perceived versus induced musical emotions

Pianist A: I feel the emotions but it's more indirect. It's more *through* the music I participate, but I'm not really feeling the emotions in my normal mind. (p.6)

Pianist B: Pianist B: I did (feel pain) yes I did, yes yes yes. (p.6)

Pianist C: So even if you are not feeling the emotions, like I did not today, I know what to do to get that sort of effect out. (p.12)

Pianist D: Well I don't think one experiences the emotion as such. I think you remove yourself. (p.3)

Pianist E: Do I feel death and pain and all that and if I don't then what's wrong with me and how can I do that right? Um … I don't know that the emotions that I am experiencing are *that* defined. (p.14)

Pianist F: I think I was taken to an emotional state that remained during the performance. (p.2)

Pianist G: I experience much more heightened emotions than just the sort of happiness and lightness of the Haydn. It's much more heightened and connected. (p.3)

Pianist H: Sometimes I'll imagine an image … there are African churches on the koppie and sometimes you hear it and you think, aah, I'm going to cry it's so beautiful, and then I think remember that feeling? (p.21)

Subordinate theme 3: Prior experience of identified musical emotion

Pianist B: When I prepare I think those things … what I think this is about. And then when I let it happen during performance it's sort of … a *reaction* rather than … putting it into it. (p.13)

Pianist C: Yes it's kind of already practised in so even if I'm not completely feeling it I can still give the idea that I am feeling it 'cause I know how it's supposed to sound like. (p.12)

Pianist D: You take the essence of the emotion and you identify those essences while practising and rehearsing the thing and then when it comes to performance you are able to put it in there. (p.3)

Pianist E: So the emotions that came today are not foreign or strange to me … They're not new no … I didn't practise the emotions … I have *experienced* them before. (p.3)

Pianist F: They are all stored … the emotion is already there … in an embryonic state and then when you play, your own sound enhances it and makes it come to life. (p.3)

Pianist H: It becomes so sort of compressed … I know how it's going to go. (p.10)

Subordinate theme 4: Performance-related emotions

Pianist A: Nervousness and anxiety tend to ruin your performance, and your ability to participate in the music. (p.10)

Pianist B: It felt very insecure, and the whole time, I tried to re-engage myself, re-engage with the music, and to try and … *say* what I want to say, but the whole time, I felt like I wasn't *able* to. (p.4)

Pianist C: If you have these negative emotions impacting you, it distracts you. (p.3)

Pianist D: But I think what makes a good musician is to oppress that (feeling of frustration or anger) immediately … you must be able to go on (p.13).

Pianist F: I relied on emotions focusing more on them to forget about how upsetting it would be … I don't want to be in an upset mood when I play because then I don't enjoy the music (p.7)

Pianist H: I mean the more experience one gets the more you learn to let those things go but there are just some days where it's hard to settle down (p.12). Always listen to the sound because that then pulls you back into that space. (p.12)

Subordinate theme 5: Emotional control

Pianist A: But I must be careful because otherwise if you let yourself go too much with the enthusiasm, you can start making mistakes, and then the whole thing collapses. (p.3)

Pianist B: I felt completely overwhelmed by sort of non-musical emotion, and when I get carried away in musical emotion, it snaps me out because it distracts me. (p.12)

Pianist C: But it (hysteria) also made me, especially in the third movement, made me like miss notes and lose control and things like that from playing too fast. (p.7). If you lose control over your emotions, then you can lose control over the score. (p.11)

Pianist D: If the emotion gets the upper hand above thinking and reasoning, if that gets the upper hand, it's likely to end disastrous. (p.3)

Pianist E: You wanna be in control and you wanna really express everything that you have practised, but on the other hand that can lead into a very calculated performance, so there is always that little balance. (p.3)

Pianist F: It depends. Sometimes you control it, and sometimes you let it go and hope for the best … not to crash and burn. (p.5)

Pianist G: When we're faced with a dangerous situation in which we have to act and do something, we automatically don't let our emotions completely take us over, we are thinking, and you very much have to be in that state when you play. (p.9)

Subordinate theme 6: Aspects of expressive performance

Pianist A: To express the emotions that you think the composer felt, you need a lot more than the emotions, you need a whole lot of things, technical, knowledge, general culture. (p.15)

Pianist E: Music can express, it can reflect many other things. It can reflect intellect and mathematical kind of qualities, and architecture, and order, and symmetry. (p.16)

Pianist F: There are several passages in the Hummel sonata, in the last movement in particular, where it's more like a motoric sort of Flow rather than emotional Flow. (p.8)

Pianist G: You're creating electricity and excitement but, even when I'm trying to shape a phrase and be musical and make it speak, I wouldn't say it's an emotional thing. (p.6)

2. Superordinate theme 2: Performance as an embodied cognitive, emotive, and motor experience.

Subordinate theme 1: Performer–composer relationship

Pianist B: It's the marriage of the two …I feel I need to *relate* to what the composer is trying to say as well … you have to stay true to the intimacy between you and the composer and the music. (p.9)

Pianist C: If you're performing then the score comes first, and then you must adjust your emotions, or feel according to the score what you are supposed to feel. (p.14)

Pianist E: I think my goal, at least in that whole experience of … pianist–composer–performance is to put it on the plate, in the most compelling way. (p.15)

Pianist F: I cannot think of one single moment during a performance … where I don't try to be a beacon ah, or a medium … to *reach* the audience. (p.1)

Pianist G: I find it such an interesting challenge to bring a bit of your own spin, or … your own personality … to what the composer has dictated. (p.16)

Pianist H: It is a communion … that complete oneness. (p.6)

Subordinate theme 2: Cognitive–emotive duality

Pianist A: There's a part of me that participates in the music emotionally, but there's another part that has to remain concentrated and keep everything together. (p.3)

Pianist D: It's a *balance* … your ability to balance your cognitive and your subconscious – your emotions. (p.19)

Pianist E: There is some kind of a dual personality when you play. (p.4)

Pianist F: I think it's a controlled schizophrenia because your brain basically splits into two different parts. (p.2)

Pianist G: Yea, definitely two different parts of the brain, the logical part … combined with the emotional, creative part. (p.10)

Subordinate theme 3: Embodied performance

Pianist A: My piano stool was too high so I couldn't get my weight in, and this caused me to be a bit less open and … able to express myself completely. (p.2)

Pianist B: And I feel myself breathing … breathing deeply … and it's effortless. (p.8)

Pianist D: Your mouth gets dry … your hands are sweaty … you're quite jumpy. (p.10)

Pianist F: I am thinking about passionate moments in a piece of music that somehow sometimes can make you feel more the idea of moving forward, almost like *hugging* the piano. (p.4)

Pianist G: Heightened emotional intensity … sort of leaning in and experiencing … more of a closeness with the instrument. (p.2)

Pianist H: When you sit at a piano … I can take it in, and it's this sort of *embrace* that you can do here, and it feels like your whole body's just ready to be part of the piano. (p.16)

3. Superordinate theme 3: Optimal performance experience

Subordinate theme 1: Defining the zone

Pianist A: When you are in the zone, everything … comes on its own, it Flows, and when you suddenly make a mistake, or something sudden happens, you are shocked back into reality. (p.17)

Pianist B: It's very relaxed, but it's as if you're watching your hands … as if you are enjoying the music with the audience, and not really doing anything. (p.8)

Pianist D: You're *experiencing* the notes as you play them. Not necessarily *thinking* of them but letting them Flow from you. (p.16)

Pianist E: But to some of us it is the greatest narrative of creation. That's the trigger, this is the spark – the unknown. (p.13)

Pianist F: It's totally absorbing, one hundred percent. (p.12)

Pianist G: You're "in the zone", it's like you're in another state of mind, on another planet. (p.7)

Pianist H: It's very focused but it's not controlled, it's like this happy confidence. And it's self-fulfilling, it's a *deep* sense of connection with the music, and with the world, and with the audience (p.13)

Pianist H: to the space … beyond your personality, beyond the composer's personality, beyond the music. It's the space where the music exists as an entity in its own right, (p.6)

Subordinate theme 2: Flow factors

Pianist A: You need to be technically very secure. (p.10)

Pianist B: Or something that doesn't work musically … when you get to that spot, you come out of the transcendence, you make sure it happens correctly … you sort of slip out of that zone for a split second, but you go right back. (p.10)

Pianist C: It went in and out today, because I would catch myself thinking about stupid things and then I would take my concentration back to what I'm actually doing on the piano. (p.13)

Pianist D: It doesn't evolve, you have to *get into* the zone, a piece doesn't always necessarily *start* in the zone. (p.21)

Pianist F: The disturbing elements did fight harder to get me out of that state, but I don't think they succeeded. I had to fight harder. The concentration had to be deeper tonight. (p.8)

Pianist G: I have developed the skill of being able to consciously enter the zone, I can consciously check out … and that's muscle memory. (p.12)

Pianist H: The (mental) preparation is really important … I sort of stop talking to people a few hours before I play, you know, I get quite antisocial … because you're kind of focusing in on that point in time. (p.10)