Perfectionism in South African university music students: Correlations with academic motivation and performance anxiety

by

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ABSTRACT

Perfectionism is often associated with the positive characteristics of motivation, effort and achievement. However, perfectionism encouraged by the views of others may result in increased levels of anxiety and ultimately lead to inferior academic performances of undergraduate university students.

The aim of the study is to examine whether, and if so, to what extent perfectionism is related to academic motivation and performance anxiety in BA (Music) and BMus students. A total of 93 music students from four South African universities' music departments participated in the study. Significant correlations between perfectionism, academic motivation and performance anxiety within the sample are explored. Additionally, the perfectionism, motivation and anxiety levels of the students are compared according to confounding variables such as the academic institution, type of music degree, academic year, gender, home language and first instrument. The study follows a quantitative survey design consisting of the Multidimensional Perfectionism Scale (MPS), the Work Preference Inventory (WPI) and the Performance Anxiety Inventory-Revised (PAI-R).

Strong positive correlations were found between the Concern over Mistakes subscale of perfectionism and the Extrinsic Motivation: Outward dimension. The Personal Standards subscale of perfectionism showed moderate to strong correlations to the Intrinsic Motivation: Challenge and Extrinsic Motivation: Compensation dimensions. The BA (Music) students scored significantly higher than the BMus students in Performance Anxiety, Parental Expectations and Parental Criticism. Students from the Other language (African language) group scored significantly higher in both the perfectionism subscales of Parental Expectations and Parental Criticism.

The study provides valuable insight into the perfectionistic trends and its effect on motivational orientations in South African undergraduate music students, particularly the differences between the BA (Music) and BMus degrees, which have not yet been investigated. The study verifies various inter-correlations between aspects of perfectionism and motivation with specific emphasis on the parental dimensions of perfectionism.

Keywords
Perfectionism, academic motivation, performance anxiety, music students, intrinsic, extrinsic, South Africa, university

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CHAPTER 1

Introduction

1.1 Introduction and background to the study

Perfectionism is considered to be a common trait among music students, as well as performing artists. The competitive atmosphere, high technical and artistic standards, and the time-consuming nature of developing musical proficiency, are all factors which contribute to this supposition. From my own experience of studying music at an undergraduate level, I can acknowledge personal struggles with perfectionistic tendencies. These often manifested in unrealistic academic expectations, high levels of self-criticism, and continuously questioning my own competency. These habits have more often than not, led to disappointment and frustration. I have, however, noticed similar trends in my fellow students who predominantly justified their own experiences of perfectionism by attributing it to a 'lack of skill' or 'incompetence'. This phenomenon fascinates me as, with increased reading, it became apparent that perfectionism is a complex and multifaceted reality for many performing artists.

It is widely accepted by researchers that perfectionism can be differentiated into two separate strains with different causes: perfectionistic strivings and perfectionistic concerns. According to Stoeber and Otto (2006), the perfectionistic strivings dimension consist of healthy aspects such as high personal standards and the striving for excellence. In contrast, the perfectionistic concerns dimension involves aspects of perfectionism that are considered maladaptive, such as concern over mistakes, uncertainties regarding behaviour, incongruity between expectations and results, negative reactions to imperfections and perceived pressure from others to be perfect. Whereas perfectionistic strivings manifest in the individual's self-perceptions, perfectionistic concerns are driven by outward perspectives. The distinction between these two types is critical in the analysis of this debilitating condition.

Perfectionism in music students, which is often manifested through high personal standards and increased levels of self-criticism, appears to relate with levels of performance anxiety and overall academic achievement. A number of studies have implied correlations between perfectionism and music performance anxiety (Kenny et al. 2004; McQuade 2008), and between perfectionism and motivational tendencies in university students (Mills & Blankstein 2000; Miquelon et al. 2005; Stoeber et al. 2009).

McQuade (2008) considered perfectionism, anxiety and self-efficacy in students from various performing arts departments, including theatre, music and drama. This study suggests performance anxiety to be negatively related to both optimism and self-efficacy, with no significant correlations between perfectionism and performance anxiety. Stoeber et al. (2009) studied the relations between perfectionism, motivation and test anxiety in university students. Findings indicated a positive relation between self-oriented perfectionism and intrinsic academic motivation, whereas socially-prescribed perfectionism correlated with increased levels of both extrinsic academic motivation and test anxiety.

A review of previous studies revealed several gaps in the literature. There seems to be very limited research on the interaction between perfectionism, motivation and anxiety in the music tertiary context. A greater understanding of the dynamics of perfectionism can contribute to the overall wellbeing of the South African music student. The following questions came to light and encouraged the development of the proposed research idea:

- To what extent do music students experience perfectionism?
- How does perfectionism affect performance and overall academic motivation?
- What are the roles of social factors, such as perceived parental pressure, in the experience of perfectionism, academic motivation and music performance anxiety at university level?

1.2 Aim of the study

The aim of the study is to explore possible relations between perfectionism, academic motivation and music performance anxiety. Firstly, the nature of the various correlations will be examined.[1] Subsequently, the concepts of perfectionism and motivation will be considered independently – noting the interrelations between the dimensions of each concept.

The research is largely informed by Stoeber and Eismann (2007) who investigated perfectionism in young school-level musicians from two art schools in Germany. The current study, however, extends studies on perfectionism (Mor et al. 1995; Kenny et al. 2004; Stoeber & Eismann 2007) in two primary ways:

[1] The various correlations refer to the relations between perfectionism and academic motivation; perfectionism and performance anxiety; and academic motivation and performance anxiety.

- The research group will include first, second and third year music students, enrolled for either a BA (Music) or BMus degree, with any choice of instrument or field of specialization.
- Previous studies focused mainly on music performance majors.

1.3 Research questions

The main research question is:

- How does perfectionism relate to academic motivation and performance anxiety in first, second and third year music students?

The following secondary research questions are addressed:

- How does perfectionism correlate with academic motivation in first, second and third year music students?
- To what extent is perfectionism related to performance anxiety in first, second and third year music students?
- What is the relation between academic motivation and performance anxiety in first, second and third year music students?
- What are the relations between the multidimensional perfectionistic tendencies in first, second and third year music students?
- What are the relations between the motivational drives in the first, second and third year music students?

Although the main aim of the study involves the correlation between perfectionism, academic motivation and performance anxiety in music students, additional demographic variables will be considered in order to ensure the transparency of the results. The confounding variables under consideration include the academic institution, academic year, type of music degree, gender, home language and first instrument. The study is guided by the following hypotheses:

H1: There are significant differences between the music students from the various universities regarding perfectionism, academic motivation and performance anxiety.

H2: There are significant differences between the music students from the different academic years regarding perfectionism, academic motivation and performance anxiety.

H3: There are significant differences between the BA (Music) and BMus students regarding perfectionism, academic motivation and performance anxiety.

H4: There are significant differences between the gender groups regarding perfectionism, academic motivation and performance anxiety.

H5: There are significant differences between the language groups regarding perfectionism, academic motivation and performance anxiety.

H6: There are significant differences between the instrument groups[2] regarding perfectionism, academic motivation and performance anxiety.

1.4 Key concepts

1.4.1 Perfectionism

Many attempts to clarify and define perfectionism have been made, however, it remains a vague concept. Leaders in the field, Frost et al. (1990: 449) and Hewitt and Flett (1991a: 456) define perfectionism as the striving for precision accompanied by the setting of exceptionally high standards for performance. In addition, an overly critical evaluation of one's actions tends to co-occur.

The distinction between perfectionistic strivings and perfectionistic concerns are essential in the study of perfectionism. Perfectionistic strivings are considered to be adaptive in nature, and related to achievement and motivation. In contrast, perfectionistic concerns refer to the dysfunctional qualities of perfectionism present in psychopathology (Frost et al. 1993). The perfectionistic strivings and concerns are categories based on the implications of perfectionism. Other categories, such as self-oriented and socially-prescribed perfectionism, place greater emphasis on the focus of perfectionism. Self-oriented perfectionism includes the setting of demanding standards for oneself, as well as the strict evaluation of one's own behaviour and performance (Hewitt & Flett 1991a: 457). Socially-prescribed perfectionism involves the supposed need to reach the expectations and standards prescribed by significant others. The individual is under the impression that significant others evaluate them rigorously and expect them to meet unrealistic standards (Hewitt & Flett 1991a: 457).

[2] The instrument groups involved in this study include Keyboard (piano and organ), Percussion, Strings (violin, viola or cello), Voice and Winds (woodwind and brass).

1.4.2 Academic motivation

The term motivation is defined by the *Paperback Oxford English Dictionary* (2001: 549) as "desire to do; interest or drive". For the purposes of this study, the understanding of motivation is limited to the domain of music studies. Consequently, the term academic motivation is employed. According to Miquelon et al. (2005: 916) academic motivation is the "self-regulation style [sic] toward academic activities".

It is furthermore necessary to distinguish between intrinsic and extrinsic motivation. Intrinsic motivation is explained as the preference for choice, autonomy, challenge and complexity. It involves engagement in tasks and an ability to draw enjoyment from it. In contrast, extrinsic motivation concerns over evaluation, recognition, and competition, as well as a focus on tangible incentives and the dictation of others (Amabile et al. 1994: 950.).

1.4.3 Music performance anxiety

General anxiety is explained as "a future orientated mood state, accompanied by strong negative affect" (Lake 2009: 93). It is also considered as a "normal emotional state that can be functional within certain limits" (Barlow & Durand 2005, in Lake 2009: 93). More specifically, Kenny and Osborne (2006: 103) regard performance anxiety as "a group of disorders that affect individuals in a range of endeavours (sp), from test-taking (Elliott & McGregor 1999), maths performance (Ashcraft & Faust 1994), public speaking (Merritt et al. 2001), sport (Hall & Kerr 1998; Hanton et al. 2002) and the performing arts in dance (Tamborrino 2001), acting (Wilson 2002) and music (Deen 2000; Ryan 2003)". Consequently, music performance anxiety is defined as "the anxiety experienced by a student performing artist immediately preceding a performance" (McQuade 2008: 7). Kenny (2011: 50) describes it as a fear related to musical performance, but not necessarily impairing musical capability. The anxiety can be presented by a combination of cognitive, affective, somatic and behavioural symptoms across a variety of performance settings.

1.5 Assumptions

I acknowledge that the study was partly driven by a set of assumptions. This is explained in the following section.

The study was approached with the following **personal** ideas and beliefs:

- The majority of music students are driven by adaptive and maladaptive perfectionistic tendencies. Both the intrinsic nature of self-oriented perfectionism and the extrinsic

aspects of socially-prescribed perfectionism are evident in music students' academic drive.

- The negative aspects of perfectionism are responsible for the experience of performance anxiety.

Ontology is defined as "the study of nature and the form of reality" (Niewenhuis 2010: 53), and refers to whether the world is viewed as something external as opposed to a process of active involvement. Both of the following **ontological** suppositions guided my research:

- Reality within a social context has an objective nature and is therefore understood from an external point of view. This is known the *objectivist* position (Cohen et al. 2001: 5; Maree & Van der Westhuizen 2010: 31).
- The *constructivist* view holds that social reality is comprehended within levels of individual consciousness. This is achieved through creations of the mind such as words and names and through social interaction (Bryman 2012: 16-18; Cohen et al. 2001: 5; Maree & Van der Westhuizen 2010: 31).

The current study follows the ontological positions of both objectivism and constructivism. During the data collection procedure, which will involve scientifically validated questionnaires, the researcher will take an objective stance. However, with the interpretation of the data, interpersonal and environmental variables will be taken into account – thereby changing to a position of constructivism.

Epistemology refers to the way knowledge is viewed and indicates the quality of the relationship between the researcher and the potential knowledge (Terre Blanche & Durrheim 2002: 6). An **epistemological** consideration is concerned with what is regarded as satisfactory knowledge within a specific field (Bryman 2012: 27). The following assumption guided the research:

- The *positivist* stance regards knowledge as objective, real and tangible, implying the existence of one objective reality (Cohen et al. 2001: 6; Teddlie & Tashakkori 2009). The researcher adopts the role as an observer and relies on scientific methods for data collection.

True to the nature of positivism, the current study involves features of both deductive and inductive reasoning. A deductive approach involves theory guiding the research, whereas inductive research results in theory (Bryman 2012: 19).

The following perspectives on **human nature** exist:

- Determinism: “All events including human actions and choices are fully determined by preceding events and states of affairs, and so that freedom of choice is illusory” (Collins English Dictionary 2013).
- Voluntarism: “The theory that the will rather than the intellect is the ultimate principle of reality” (Collins English Dictionary 2013).

For this study, I adopted a perspective situated between absolute determinism and voluntarism. The influence of the environment on human behaviour (determinism) together with the capacity of human beings to activate their own behaviour (voluntarism), are acknowledged (Burrell & Morgan in Cohen et al. 2001: 7).

The procedures and methods employed in this study follow a **nomothetic** approach. Although existing theories are used as framework, the primary intention is to discover and establish general patterns, tendencies and laws among music students (Maree & Van der Westhuizen 2010: 33).

1.6 Research design and methodology

The study follows a quantitative research design with the aim to establish, confirm or validate relationships between variables and to formulate generalisations (Ivankova et al. 2010: 257). The correlations between perfectionism, academic motivation and music performance anxiety are explored only after the hypotheses and measurement methods have been structured. A detailed account of the methodology is presented in Chapter 3.

1.6.1 Data collection and sample size

Within the character of the quantitative approach, data was collected according to a standardised procedure where after it was analysed and interpreted by means of a number of statistical methods (Leedy & Ormrod 2005: 94-97). Altogether 93 first, second and third year BA (Music) and BMus students from the University of Pretoria, North-West University, University of the Free State and Stellenbosch University participated in the study. After the students were informed of the aim and ethical implications of the study, questionnaires were

distributed to those willing to participate. The survey was completed under the researcher's supervision in a class context. Afterwards, completed scripts were collected and sent for statistical analysis.

1.6.2 Research instruments

The data was collected by means of a questionnaire which consisted of the following research instruments: the Multidimensional Perfectionism Scale (MPS) (Frost et al. 1990: 455); the Work Preference Inventory (WPI) (Amabile et al. 1994: 956) and the Performance Anxiety Inventory-Revised (PAI-R)[3] (Rae & McCambridge 2004: 435). In order to ensure authenticity, the original scale system of both the MPS and the WPI was retained. The Likert Scale of the PAI-R was, however, altered to reflect the point system used by Stoeber and Eismann (2007), thereby facilitating comparisons between the two studies.[4]

1.6.3 Questionnaire

The questionnaire consists of 83 questions which are divided into four sections:
Section A includes biographical and general information such as age, gender, main music instrument and the name of the academic institution.

Section B consists of the MPS which includes 35 questions measuring the six dimensions of perfectionism: Concern over Mistakes; Personal Standards; Parental Expectations; Parental Criticism; Doubts about Actions and Organization. Responses are indicated on a five-point Likert Scale, from 1 (strongly disagree) to 5 (strongly agree).

Section C consists of the student version of the WPI. This 30-item questionnaire is scored on a four-point Likert Scale and assesses students' general intrinsic and extrinsic motivational attitude toward their studies. The two primary scales used are Intrinsic and Extrinsic Motivation. Each scale is subdivided into two secondary scales. The Intrinsic motivation scale includes the Enjoyment and Challenge subscales; the Extrinsic Motivation scale involves the Outward and Compensation subscales.

Section D includes the revised PAI (Rae & McCambridge 2004). The inventory consists of 11 items and measures anxiety levels during a practical music exam. A six-point Likert Scale, from 1 (never) to 6 (always), is used.

[3] The abbreviations will be used throughout the study to refer to the relevant research instrument.
[4] More information on this alteration is included in Chapter 2, p. 57 and Chapter 3, p. 65-66.

1.6.4 Data analysis

Quantitative data analysis involves techniques by which data is changed to a numerical form before it is subjected to statistical analysis (Rubin & Babbie 2005: 552). According to Fouché and Bartley (2012: 249) the intention of data analysis is "to reduce data to an intelligible and interpretable form so that the relations of research problems can be studied and tested, and conclusions drawn". Statistical analysis consists of assembling, classifying, tabulating and summarising data in a format that enables interpretation. It is only after interpretation that research questions can be answered.

The data from the questionnaires was statistically analysed by an independent external statistician. Relationships between the different facets of perfectionism, academic motivation and music performance anxiety were assessed using correlation and inter-correlation analyses, as well as the simple regression technique.

1.6.5 Pilot study

A pilot study was conducted by distributing the questionnaire to randomly chosen, non-music, first, second and third year students at the University of Pretoria's campus. This was to ensure that all music students, of which many are not first language English speakers, would be able to understand the questionnaire during the actual data collection. Necessary adjustments were made and technical errors, as well as unclear, leading or vague questions were adapted and corrected prior to the final distribution of the questionnaire (Delport 2005: 172).

A total of 15 students participated in the pilot study – six are English first language speakers and nine English second language speakers. After the feedback from the students, it was realised that the questionnaire included repetition of questions, phrases and words. After careful contemplation, which included changing the positions of a number of questions and rephrasing some of the text, it was decided to keep the standardised sections of the questionnaire in its original format. Seeing that none of the participating students interpreted the questions as vague or misleading, no sufficient reasons were found to alter any of the set research instruments.

1.7 Ethical considerations

All participants were notified of the ethical implications of the study and were asked to sign a letter of informed consent. They were informed about the nature of the study, their right to withdraw from the study at any time without experiencing negative consequences, the insurance of their anonymity during the whole period of the research, the safekeeping and

confidentiality of the data at the University of Pretoria Department of Music for a period of 15 years and the availability of and access to the final research results.

1.8 Notes to the reader: Concept clarification and terminology

Different terms are used to refer to the various types of perfectionism, motivation and performance anxiety. Concepts with similar meanings will be explained and clarified in the following section.

1.8.1 Perfectionism

Perfectionism can be regarded as adaptive and functional, or dysfunctional and maladaptive; hence the perfectionistic strivings and perfectionistic concerns categories (Frost et al. 1993). Furthermore, perfectionism can have several sources – including internal and external origins (Hewitt & Flett 1991a). The proposed study refers to perfectionism according to both classification systems – considering perfectionistic strivings and concerns, as well as self-oriented and socially-prescribed perfectionism. The formulation of perfectionism as a multidimensional concept evolved from these categories.

There are two multidimensional models that are often used as measures in the quantitative study of perfectionism. This study will make use of the multidimensional model of Frost et al. (1990) and *not* the model of Hewitt and Flett (1991b). Frost et al. identified six dimensions of perfectionism, namely Concern over Mistakes, Personal Standards, Parental Expectations, Parental Criticism, Doubts about Actions and Organization. A brief explanation of each of the dimensions of perfectionism is included in Chapter 2.

The multidimensional model of perfectionism accommodates established categories of perfectionism, such as perfectionistic strivings, perfectionistic concerns, self-oriented perfectionism and socially-prescribed perfectionism. Each dimension in the multidimensional model (Frost et al. 1990) represents possible functional and dysfunctional aspects, as well as internal and external influences. This study therefore attempts to interpret perfectionism on a continuum, as opposed to dichotomous categories.

1.8.2 Academic motivation

In this study, motivation is limited to university music studies. Participants are examined in terms of the four subscales of the WPI (Amabile et al. 1994) – Intrinsic Motivation: Enjoyment; Intrinsic Motivation: Challenge; Extrinsic Motivation: Outward and Extrinsic Motivation: Compensation. Definitions of the subscales are included in Chapter 2 and Chapter 3.

1.8.3 Music performance anxiety

Performance anxiety generally refers to any performance situation, such as public speaking, dance recitals, stage productions and music performances. In this study, performance anxiety always refers to the musical context – specifically to musical performances related to academic studies – unless otherwise specified.

1.9 Outline of chapters

Chapter 1: Overview and rationale

Chapter One serves as an introduction to the study. An outline of the rationale of the study together with the research questions, definition of concepts, epistemology, research design and methodology are included in this chapter.

Chapter 2: Conceptual framework

In Chapter Two the conceptual framework of the study is outlined by exploring the available literature on perfectionism, academic motivation and music performance anxiety.

Chapter 3: Research design and methodology

Chapter Three considers the study in terms of the research design, methodology and research process. In addition, the trustworthiness of the study together with the relevant ethical issues are addressed.

Chapter 4: Presentation of the research results

Chapter Four presents the raw qualitative data, an analysis of the data, and an interpretation thereof.

Chapter 5: Discussion of the research results

In Chapter Five a discussion of the results are included. Existing literature is incorporated to enable comparisons.

Chapter 6: Final conclusions and recommendations

In Chapter Six the results and conclusions of the study are summarised. Limitations, potential contributions of the study and recommendations for further research are also included.

1.10 Conclusion and summary

Chapter One provided a general overview and introduction to the rationale of the study. The aim of the study and the accompanying research questions are clarified. Perfectionism,

academic motivation and music performance anxiety are described as key concepts, and the guiding research assumptions are acknowledged. A brief explanation of the quantitative research approach is given by referring to the procedure of data collection, the research instruments used and the analysis of data. Lastly, ethical considerations are identified. In the following chapter, relevant literature will be examined in order to clarify the theoretical framework of the study.

CHAPTER 2
Literature review

2.1 Introduction

This chapter includes a broad overview of the literature on perfectionism, academic motivation and music performance anxiety. Perfectionism is discussed in terms of its characteristics, definitions, origins, adaptive and maladaptive nature and treatment. The discussion also includes examples of studies examining the manifestation of perfectionism in musicians, as well as a concise outline of the standardised measurement instruments for perfectionism. Secondly, there is a summary of the key concepts and underlying theories of academic motivation. This includes a synopsis of relevant studies, some of which illustrate the connection between academic motivation and perfectionism. Thirdly, the origins, development, measurement and treatment of music performance anxiety are explored and the relation of music performance anxiety to both perfectionism and motivation is taken into account. The chapter concludes with a review of the current research on the correlations between perfectionism, motivation and anxiety.

2.2 Perfectionism

Perfectionism is believed to contribute to the wellbeing and performance of musicians. The majority of research focuses on the prevalence of perfectionism among generally gifted individuals (LoCicero & Ashby 2000; Siegle & Schuler 2000; Neumeister 2004). Only a few studies consider perfectionism in the context of music (Mor et al. 1995; Kenny et al. 2004; Stoeber & Eismann 2007).

2.2.1 Characteristics of perfectionism

Clinicians such as Hollender (1965), Hamachek (1978) and Burns (1980) have gone to great lengths to determine the specific characteristics of perfectionism. Firstly, the cognitive process of selective attention is significant in maintaining perfectionism. Hollender (1965: 95; 99) emphasises the perfectionist's tendency to focus solely on imperfections, presenting a dichotomous cognitive style. As a result, such individuals view themselves as being judged according to their achievements rather than their characteristics. Secondly, perfectionism refers not to doing one's best, but rather to "doing better than has ever been done before...It always seems to these persons that they could – and should – do better..." (Hamachek 1978: 27). Thirdly, Hamachek (1978: 28) identifies the fear of failure rather than the desire for improvement as the drive behind perfectionism. Lastly, perfectionism consists of setting unrealistically high standards, rigidly adhering to them and interpreting events in a distorted

way. Individuals tend to define themselves according to their ability to achieve these standards (Burns 1980, in Shafran et al. 2002: 774).

Perfectionism may cause other difficulties. Constant dissatisfaction often leads to distress which, in turn, may develop into depression, performance anxiety, social anxiety, writer's block, procrastination, study inefficiency and obsessive-compulsive indications (Barrow & Moore 1983; Berry 1975; Burns 1980; Hewitt & Dyck 1986). Halgin and Leahy (1989: 223) point out that social difficulties related to perfectionism, specifically the avoidance of close relationships, may be rooted in the "fear that becoming open to others would result in vulnerability, derision, and ultimate rejection".

2.2.2 Definitions of perfectionism

The concept of perfectionism is difficult to define, owing partly to the challenge of differentiating between perfectionists and those who are successful and highly competent. Hollender (1965: 94) conceptualises perfectionism as "the practice of demanding of oneself or others a higher quality of performance than is required by the situation", and Burns (1980: 34) describes perfectionists as "those whose standards are high beyond reach or reason, people who strain compulsively and unremittingly toward impossible goals and who measure their own worth entirely in terms of productivity and accomplishment". He adds that this "drive to excel can only be self-defeating". It is later expanded to the "setting of excessively high standards for performance accompanied by overly critical self-evaluation" (Frost et al. 1990). Perfectionism was considered to be a characteristic of all the domains of life (Hewitt & Flett 1991b). Subsequent studies have, however, suggested levels of perfectionism differing between life domains (Mitchelson & Burns 1998; Dunn et al. 2005), with work, studies and bodily hygiene rating the highest (Stoeber & Stoeber 2009). From the clinical perspective, perfectionism is defined as "the overdependence of self-evaluation on the determined pursuit of personally demanding, self-imposed standards in at least one highly salient domain, despite adverse consequences" (Shafran et al. 2002: 778). These unfavourable consequences may be emotional (e.g. depression), social (e.g. social isolation), physical (e.g. insomnia), cognitive (e.g. impaired concentration), or behavioural (e.g. checking work repeatedly) in nature (Rhéaume et al. 2000: 120-121).

From these various definitions, one can assume that perfectionism involves setting high personal standards accompanied by critical self-evaluation and an ever-present dissatisfaction with one's performances or achievements. Furthermore, it is clear that perfectionism tends to occur only in domains that have personal significance, varying

according to the specific individual's priorities. This study will focus on the domain of music studies.

2.2.3 Origin of perfectionism

While most literature on the field has focused on uncovering the structure of perfectionism, little research has been conducted on its origin. Some believe that perfectionism is created within the family, as several authors suggest parental influence and childhood development as the main sources of most perfectionistic tendencies (Craddock et al. 2009; Flett et al. 1995a; Kawamura et al. 2002; Neumeister & Finch 2006). Other possible influences include environmental and societal factors (Flett et al. 2002). Recent studies propose parents' perfectionism, parental pressure and parenting style to indicate the influence of the parent on the development of perfectionism (Stoeber & Childs 2011).

Parents' Perfectionism

The hypothesis of parental perfectionism derives from the social learning theory (Bandura 1977) and suggests that perfectionism is developed by the "modelling" of the parents' perfectionism (Stoeber & Childs 2011). This statement is supported by research suggesting significant similarities between the perfectionism of university students and the perfectionistic tendencies of their parents (Frost et al. 1990; Vieth & Trull 1999; Chang 2000). The study by Vieth and Trull indicated an interesting discovery on gender differences and perfectionism: female students displayed a higher correlation with their mothers, and male students with their fathers. This implied the significance of same-sex modelling as opposed to opposite-sex modelling.

Parental pressure

The parental pressure hypothesis is a combination of two models of socialisation: the social expectations model and the social reactions model (Flett et al. 2002). Parental pressure consists of parental expectations (social expectations) and the resulting parental criticism (social reactions) should the child fail to meet these expectations. Although parental pressure has traditionally been associated with maladaptive perfectionism (Frost et al. 1993; Stoeber & Otto 2006), a number of studies (Stöber 1998; Stoeber & Eismann 2007) have found a relation to adaptive perfectionism. An explanation for this contradiction may be found in the fact that the two elements of parental pressure can have contrasting outcomes. Parental expectations may result primarily in perfectionistic strivings, whereas parental criticism may lead mainly to perfectionistic concerns (Rice et al. 2005).

Parenting style

The three styles of parenting have been identified as authoritarian, permissive and authoritative (Baumrind 1971). Authoritarian parenting is characterised by restriction, punishment and excessive control. In contrast to overinvolved, authoritarian parenting, permissive parenting is characterised by little involvement or interest in the child's life. Authoritative parenting is regarded as the most favourable style, and is described as the "use of discipline with reason and warmth" (Flett et al. 1995b). In recent years, a fourth parenting style has been recognised as parental psychological control (Soenens et al. 2005). Unlike the authoritarian style, psychological control does not entail overt conflict. It is characterised by withdrawal of love and "a highly evaluative way of interacting", which tends to "induce guilt and instil anxiety" (Craddock et al. 2009: 137).

The parenting style hypothesis is supported by both the theory of parenting styles (Baumrind 1971; 1991) and research suggesting a connection between authoritarian and controlling parenting styles and higher levels of psychological maladjustment (Darling & Steinberg 1993). Neumeister and Finch (2006) suggested various relations between parenting styles, attachment orientations and perfectionism. They discovered that both the authoritative and permissive parenting styles related to the secure attachment orientation, whereas the authoritarian parenting style correlated with the insecure attachment orientation. In turn, the attachment styles correlated with perfectionism – the insecure attachment orientation correlated with either self-oriented or socially-prescribed perfectionism. This concurs with research by Enns et al. (2002), Flett et al. (2002) and Kawamura et al. (2002), suggesting a link between a harsh, authoritarian parenting style and high levels of dysfunctional perfectionism. In addition, the parenting style of psychological control has been found to increase maladaptive perfectionism in adolescents (Soenens et al. 2008).

The link between dysfunctional perfectionism and the perception of having authoritarian parents can be explained in several ways. A child's sense of worth is frequently based on approval from the parents (Kawamura et al. 2002). If performances falling short of perfection are often followed by parental criticism, the child may develop a fear of failure (Burns 1980; Driscoll 1982). Children can also internalise their parents' disapproval and develop a self-critical approach (Kawamura et al. 2002). Regardless of the actual parenting style, it is possible that perfectionists perceive their parents as being harsh and critical. Kawamura et al. (2002: 325) suggest that "because of their own evaluative concerns, perfectionists may have interpreted any mild admonishment from their parents as harsh criticism".

However, parenting styles may also contribute to decreasing levels of maladaptive perfectionism. Miller-Day and Marks (2006) reported diminished perfectionistic concerns in reaction to parental responsiveness and positive parental communication. It is nevertheless still unclear if any parental nurturing style may give rise to the development of perfectionistic strivings.

Family systems model

Parenting styles exist among a wider set of variables within the family systems. The family systems model (Gorall et al. 2004) consists of two structural dimensions, namely cohesion and flexibility. These dimensions are used to describe important characteristics of the family system. Gorall et al. (2004: 5) describes cohesion as “the emotional bonding members have toward one another”. High levels of cohesion are known as enmeshment, while low levels are labelled as disengagement. The dimension of flexibility is defined as “the amount of change in family leadership, role relationships and relationship rules...” (Gorall et al. 2004: 5). Low flexibility is known as rigidity and includes strong resistance to change. High flexibility is, in its extreme form, known as chaos, and consists of randomness and constant change (Craddock et al. 2009: 138). The midrange levels of both cohesion and flexibility are necessary for healthy family functioning. Craddock et al. (2009) found extreme family enmeshment, in combination with an authoritarian parenting style, to be related to both adaptive and maladaptive perfectionism.

Home environment

Greenspon (2000: 204) describes family as both “a learning environment and a milieu in which one’s self-experience develops, with greater or lesser feelings of affirmation and acceptance”. Hamachek (1978) identifies two types of emotional environments in the development of maladaptive perfectionism. The first consists of conditional positive approval, while the second is characterised by the lack of approval or by inconsistent approval. In a rejecting environment, the individual may turn to perfectionism not only to avoid disapproval, but also to strive for “self-acceptance through super-human effort and grandiose achievements” (Hamachek 1978: 29). In an environment of conditional love and approval, the child may come to believe that “it is only through approval that he has a self” (Hamachek 1978: 29). Although personalities develop within a human context and those closest to the individual during the early developmental stages tend to have the strongest influence (Galatzer-Levy & Cohler 1993; Greenspon 2000; Stern 1985), it is debatable whether the emotional environment at home can fully account for the development of perfectionism.

Other influences

It remains uncertain whether, and to what extent, environmental and social factors (other than parents) contribute to the development of perfectionism in the individual (Stoeber & Childs 2011). Barrow and Moore (1983) accentuate the importance of both the educational system and popular culture in the origins of perfectionism, specifically the "emphasis on achievement and perfection" and the "predominance of unrealistic models" within these milieus (Halgin & Leahy 1989: 223). Personality is also regarded as a contributing factor. The personality trait of conscientiousness demonstrated a direct relation with the perfectionistic trait in adolescents (Stoeber et al. 2009). Increased adaptive perfectionism correlated positively with higher persistence, motivation and organisation in goal-directed behaviour. In addition, Tozzi et al. (2004) are discovering new possibilities by considering the genetic and inherited components of perfectionism.

Limitations

According to Stoeber and Childs (2011), the main limitation in the study of perfectionism is the lack of recent longitudinal studies on children and adolescents. Most of the existing studies examine university students and their parents by following a cross-sectional approach (Halverson 1988; Frost et al. 1990; Vieth & Trull 1999; Chang 2000). This includes studies on university students' retrospective feedback on perceived parenting.

2.2.4 Adaptive and maladaptive components of perfectionism

Despite a range of studies, the nature of perfectionism remains unclear. Early studies by Hamachek (1978) suggest perfectionism as ranging from "normal" to "neurotic". Normal perfectionists are "those who derive a very real sense of pleasure from the labors of a painstaking effort and who feel free to be less precise as the situation permits" (Hamachek 1978: 27). In contrast, neurotic perfectionists "establish unreasonably high standards" (Hamachek 1978: 28) and "may over-value performance and under-value the self" (Hamachek 1978: 29). Greenspon (2000: 197) disagrees with the notion of healthy perfectionism, stating that there is an absence of "unequivocal empirical or theoretical support". He emphasises the important distinction between striving for excellence and perfectionism, the latter being noticeably characterised by an obsessive fear of failure and feelings of inadequacy. Accordingly, the essence of perfectionism is described as "not striving for excellence, but rather, entertaining feelings of conditional self-acceptance" (Greenspon 2000: 202). It is, however, important to note that psychological health, high achievement and perfectionism can coexist, implying that individuals can be successful despite their perfectionism, and not because of it (Burns 1980; Greenspon 2000: 202).

Dysfunctional perfectionism

Early research interpreted perfectionism as a symptom of psychological maladjustment and disorder (Burns 1980; Pacht 1984). This was owing to the belief that people suffering from anxiety and depression often displayed high levels of perfectionism. Perfectionism was described as a unidimensional personality disposition (Burns 1980). However, during the 1990s, perfectionism evolved into a more distinguished multidimensional concept (Frost et al. 1990; Hewitt & Flett 1991b).

Although a great deal of research has been conducted on the association between multidimensional perfectionism and general psychological adjustment (Chang & Rand 2000; Dunkley et al. 2000; Chang & Sanna 2001; Dunkley et al. 2003; O'Connor & O'Connor 2003), an even greater number of studies have focused on the negative consequences of perfectionism together with coexisting psychopathology and distress (Hewitt & Flett 1991a; 1991b; 1993b; Hewitt et al. 1996; Antony et al. 1998; Shafran et al. 2002). According to Bieling et al. (2003: 164), some clinicians suggest that perfectionism results in "a chronic sense of failure, indecisiveness, procrastination and shame" (Hollender 1965; Hamachek 1978; Burns 1980; Pacht 1984). More specifically, perfectionism has been linked to psychological and physical disorders like migraine headaches, alcoholism, depression, anorexia, obsessive-compulsive personality disorder, chronic olfactory paranoid syndromes and suicide (Hollender 1965; Pacht 1984; Burns 1980). Nevertheless, as Bieling et al. (2003) have pointed out, it remains an unresolved issue whether or not perfectionism always, and uniformly, leads to adjustment difficulties for the individual.

Recent research suggests that perfectionism may possess both adaptive and maladaptive features (Enns et al. 2001; Bieling et al. 2003). From a psychometric and theoretical standpoint, evidence has supported the notion of two forms of perfectionism (Frost et al. 1993; Hill et al. 1997; Slade & Owens 1998; Cox et al. 2002).

Functional perfectionism

The literature on perfectionism has developed considerably since the establishment of the two MPS's (Frost et al. 1990; Hewitt & Flett 1991b).[5] What was initially considered to be an abnormal personality trait, became a flexible characteristic when the adaptive dimensions of perfectionism were realised. By conducting a factor analytic examination on the links between the MPS of Frost et al. (1990) and Hewitt & Flett (1991b), Frost et al. (1993) identified the existence of both maladaptive and adaptive aspects of perfectionism. The self-

[5] For a more elaborate discussion on each MPS, see p. 34-35.

oriented perfectionism (Hewitt & Flett 1991b) and the Personal Standards subscales (Frost et al. 1990) were found to be most strongly related to positive effect. The Personal Standards and Organization dimensions of Frost et al. (1990) are possibly connected to positive striving for achievement and adaptive work habits (Brown et al. 1999). Frost et al. (1990: 450) pointed out that the self-imposed “setting of and striving for high standards is certainly not in itself pathological”.

Hamachek (1978) recognised the positive components of perfectionism in his continuum of “normal" to “neurotic" perfectionism. Terry-Short et al. (1995), Rice et al. (1998), Lynd-Stevenson and Hearne (1999), and Blankstein and Dunkley (2000) followed suit by further examining the perfectionistic aspects of competence and success. “Normal” perfectionists apparently derive pleasure from their efforts to achieve, while simultaneously allowing themselves to be less than perfect according to the requirements of the situation. By contrast, “neurotic” perfectionists tolerate little possibility of errors and are therefore seldom satisfied with their task performance (Hamachek 1978). As Frost et al. (1990) pointed out, this distinction implies that perfectionism consists of high standards accompanied by the tendency to evaluate one’s own behaviour over-critically. The psychological problems associated with perfectionism are in all likelihood the result of these critical evaluations rather than setting excessively high standards.

Additionally, a number of studies (Flett et al. 1991a; 1991b; 1994) have shown self-oriented perfectionism to be positively related to self-esteem, resourcefulness and constructive striving, and to high levels of perceived personal control. However, it is important to note that self-oriented perfectionism, in combination with stress, perceived failure and high socially-prescribed perfectionism, can exacerbate the development of “neurotic" perfectionists (Blatt 1995; Flett et al. 1995a). The main dissimilarity between normal and neurotic perfectionism is that normal perfectionists are more tolerant of minor flaws while still regarding the performance as successful (Hamachek 1978).

2.2.5 Treatment of perfectionism

According to Greenspon (2000: 205), “Perfectionism is not a mental disorder that is to be cured; rather, it is a set of beliefs about oneself and one’s relation to others that needs time and an affirming relationship with someone in order to be transformed”. For this reason cognitive behavioural therapy is a preferred treatment option for dysfunctional perfectionism. Shafran et al. (2002: 786-787) suggest four phases of treatment: the identification of maladaptive perfectionism within a cognitive behavioural framework; the setting of goals for treatment (e.g. altering the individual’s scheme of self-evaluation); the use of behavioural

experiments to test contrasting hypotheses; and the application of cognitive behavioural strategies to address the individual's self-criticism and personal standards in general. This approach emphasises the importance of cognitive biases aiding in the maintenance of perfectionism. During therapy, special emphasis should be on the individual's "selective attention to the possibility of failure... and the hypervigilant monitoring of performance" (Shafran et al. 2002: 787).

In a study focusing on perfectionism in college students, Halgin and Leahy (1989) suggest the use of pragmatic blending in the treatment of perfectionism. This multi-theoretical clinical approach combines the techniques of various clinical models. Therapy is thus an "individualized response to the particular needs of each client" (Halgin & Leahy 1989: 224). Models used in this treatment plan include the psychodynamic, behavioural and person-centred approaches.

2.2.6 Perfectionism in musicians

Numerous studies in the field of gifted education have explored perfectionism as a characteristic of gifted individuals. LoCicero and Ashby (2000), Siegle and Schuler (2000) and Neumeister (2004) propose perfectionism as an important characteristic of giftedness, believing that only a few possess the ability to achieve excellence through perseverance. However, Mendaglio (2007) questions these findings by noting the lack of empirical evidence in support of the claim (Parker 2000; Dixon et al. 2004). According to Parker (2000: 177), "gifted children are predisposed to perfectionism ...perfectionism produces maladjustment, and therefore the gifted are predisposed to certain types of maladjustment...". However, the link between giftedness and pathology is debatable. Although Grinder (1985) has supported the correlation between giftedness and pathology, more recent studies (Czeschlik & Rost 1994; Nail & Evans 1997; Cross et al. 2006) have proved that gifted individuals are similarly or even better adapted to their environments than their non-gifted peers. For the purpose of this discussion, the concept of giftedness will be confined to musical ability.

Perfectionism as an essential characteristic of the skilled musician has been supported by Dews and Williams (1989: 46): "Music, perhaps more than any other artistic pursuit, demands a high level of perfection from those hopeful of being successful in it. Every aspect of music is directly related to a search for perfection." I am currently aware of three published studies involving the measurement of perfectionism in musicians – those by Mor et al. (1995), Kenny et al. (2004) and Stoeber & Eismann (2007).

In the study by Mor, Day, Flett and Hewitt (1995) titled *Perfectionism, control and components of performance anxiety in professional artists,* participants' self-reports were used to establish whether facilitating and debilitating anxiety were connected to self-oriented and socially-prescribed perfectionism. In addition, the study also explored whether low personal control, in combination with personal and social standards of perfectionism, contributes to a higher degree of debilitating anxiety and lower degrees of facilitating anxiety and goal satisfaction.

The study *Music performance anxiety and occupational stress amongst opera chorus artists and their relationship with state and trait anxiety and perfectionism* (Kenny et al. 2004) examined the correlations between state and trait anxiety, occupational stress, perfectionism, ambition and music performance anxiety. The sample group consisted of 32 full-time professional singers from a national opera company. A battery of tests was compiled into a self-report questionnaire. The tests included the State-Trait Anxiety Inventory (Spielberger 1983), the Music Performance Anxiety Scale (Cox & Kenardy 1993), the Occupational Stress Inventory (Osipow 1998), the Kenny Music PAI (Kenny et al. 2004) and the MPS (Frost et al.1990).

Stoeber and Eismann (2007) conducted the study *Perfectionism in Young Musicians: Relations to Motivation, Effort, Achievement, and Distress* on 146 musically gifted high school students. The aim of the research was to gain a deeper understanding of how the different dimensions of perfectionism are interrelated with intrinsic and extrinsic motivation, effort, achievement and distress in musicians. Data was collected by means of a self-report questionnaire based on the Perfectionism Scale (Stoeber & Rambow 2007),the Intrinsic and Extrinsic Motivation Scale (Sheldon & Elliot 1999), the PAI (Rae & McCambridge 2004), the Somatic Complaints Scale (Stöber et al. 2004; adapted from Kellmann & Kallus 2000) and the Emotional Fatigue Scale (Stöber et al. 2004; adapted from Kellmann & Kallus 2000). Effort was measured using a 6-point Likert Scale according to the number of hours spent practising each week. Two indicators were used to determine achievement – the grades achieved in subject music and the frequency of receiving a *Jungend musiziert* award.

The first two studies (Mor et al. 1995; Kenny et al. 2004) suggest that perfectionism is related to increased distress and performance anxiety in musicians. Socially-prescribed perfectionism showed the strongest association with maladaptive anxiety. Stoeber and Eismann (2007) confirmed the link between perfectionism and increasing levels of general anxiety. Surprisingly, perfectionism was also found to lead to higher levels of motivation, effort and achievement.

However, the two studies are limited in the sense that both focus predominantly on the negative characteristics of perfectionism. Furthermore, Mor, Day and Flett (1995) studied performing artists in general, combining musicians with actors and dancers, while Kenny, Davis and Oates (2004) investigated a limited subject group of only 32 musicians. Stoeber and Eismann (2007) responded to these limitations by looking into both the negative and the positive perfectionistic tendencies of 146 musicians.

2.2.7 Research instruments and methodology used in the study of perfectionism

A brief discussion of five prominent measurement scales of perfectionism follows in the next section. The MPS (Frost et al.1990); the MPS (Hewitt & Flett 1991b); the Perfectionistic Self-Presentation Scale (Hewitt & Flett 1993); the Perfectionism Questionnaire (Rhéaume et al. 1994); and the Perfectionism Inventory (Hill et al. 2004) will all be considered.

The Multidimensional Perfectionism Scale (Frost et al. 1990)

Frost, Marten, Lahart and Rosenblate identified six dimensions of perfectionism and accordingly developed a perfectionism measure, the MPS, with six subscales. These subscales are:

1. Concern over Mistakes
2. Personal Standards
3. Parental Expectations
4. Parental Criticism
5. Doubts about Actions
6. Organization

The Concern over Mistakes subscale had always been regarded as representative of the main characteristic of perfectionism. It refers to the negative reactions to mistakes, the tendency to interpret mistakes as failures and the belief that failure will undoubtedly lead to a loss of respect from others (Flett et al. 1995b). The Personal Standards subscale reflects high standards of performance and the habit of evaluating oneself according to one's performance. Parental Expectations and Parental Criticism refer to the extent to which parents are perceived as having high expectations of their children and as being excessively critical of them. Doubts about Actions reflects a combination of concern about doing things right, repeating work and falling behind. The Organization subscale refers to neatness and organization (Hill et al. 2004).

The Multidimensional Perfectionism Scale (Hewitt & Flett 1991b)

Independently of Frost et al. (1990), Hewitt and Flett developed a three-dimensional construct to assess perfectionism, which was also titled the MPS. It consists of:

1. Self-oriented perfectionism
2. Other-oriented perfectionism
3. Socially-prescribed perfectionism

Self-oriented perfectionism is closest to the original definition of perfectionism and reflects the tendency to set unrealistic standards for oneself, to focus on flaws in performance and consequently, execute a great degree of self-criticism (Hewitt & Flett 1991b). Other-oriented perfectionism refers to the inclination to assess others critically and anticipate unrealistic levels of performance from them. Socially-prescribed perfectionism reflects the need to win approval from others by accomplishing the perceived standards and expectations prescribed by significant others (Hewitt & Flett 1991b).

It is interesting that Hewitt and Flett (1991b) had already made correlations between perfectionism and motivation by identifying a significant motivational component in self-oriented perfectionism. According to the authors, this motivation is reflected primarily by striving for perfection, as well as avoiding failure. The second dimension identified by Hewitt and Flett (1991b), other-oriented perfectionism, is, in essence, similar to self-oriented perfectionism. However, the perfectionistic tendencies are directed outwardly. Whereas self-oriented perfectionism may provoke self-criticism and punishment, other-oriented perfectionism may result in blame, feelings of hostility and lack of trust in others.

As Hewitt and Flett (1991b) have pointed out, all three dimensions possess an underlying control aspect. Both self-oriented perfectionism and other-oriented perfectionism are controlled by the individual and depend on standards that can be proactively altered. On the other hand, socially-prescribed perfectionism develops out of the perception of others' forced expectations. It is therefore connected to an external locus of control. Socially-prescribed perfectionism is considered to be reactive rather than proactive. If it is present in excess, it can cause a feeling of hopelessness in the individual on account of a perceived incongruence between their own behaviour and the unrealistic standards imposed by others. This phenomenon may serve as an explanation for the connection between socially-prescribed perfectionism and psychopathology (Hewitt & Flett 1991b; Hill et al. 2004).

The Perfectionistic Self-Presentation Scale (Hewitt & Flett 1993)

The Perfectionistic Self-Presentation Scale consists of 27 items and focuses on the three dimensions of perfectionistic self-presentation:

1. Need to Appear Perfect (10 items)
2. Avoid Appearing Imperfect (10 items)
3. Avoid Disclosure of Imperfection (7 items)

The Need to Appear Perfect subscale includes items such as, "It is very important that I always appear to be on top of things'". The Avoid Appearing Imperfect subscale consists of items such as "I do not want people to see me do something unless I am very good at it". The Avoid Disclosure of Imperfection subscale measures the attempts to avoid public confession of flaws ("I try to keep my faults to myself") (Hewitt & Flett 1993).

Castro et al. (2004: 393) describe perfectionistic self-presentation as an effort to uphold a flawless public image of "performance, competence, and physical appearance". The Perfectionistic Self-Presentation Scale has proved relevant in the field of eating disorders, body dissatisfaction and self-esteem (Hewitt et al. 1995).

The Perfectionism Questionnaire (Rhéaume et al. 1994)

The Perfectionism Questionnaire aims to differentiate between adaptive and maladaptive perfectionism. The 64 ratings are distributed across four different scales. Perfectionistic tendencies are measured by ten items, followed by a second scale determining the degree to which 22 life domains are affected by perfectionism. The Demandingness Scale (8 items) considers the respondent's attitude towards a variety of people, while the Disadvantages Scale (24 items) focuses on the negative consequences of perfectionism (Rhéaume et al. 1994). The Domains Scale includes the following 22 domains: work; bodily hygiene; studies; physical appearance; social relationships; presentation of documents; spelling; dress; way of speaking; romantic relationships; eating habits; health; domestic chores (cleanliness); time management (punctuality); correspondence (mail); leisure activities; oral presentation; sports; investments/ purchases; orderliness; children's education; and repairs (home handyman) (Stoeber & Stoeber 2009).

The Perfectionism Questionnaire is often used to study the role of perfectionism in obsessive-compulsive disorder (Rhéaume et al. 2000). The scale displayed excellent construct validity within its subscales: perfectionism tendencies (10 items, $\alpha = 0.82$);

domains affected by perfectionistic behaviour (30 items, α = 0.88); and negative consequences of perfectionism (24 items, α = 0.96) (Rhéaume et al. 1994).

The Perfectionism Inventory (Hill et al. 2004)

Even though the two MPS's (Frost et al. 1990; Hewitt & Flett 1991b) seem to measure distinct dimensions of perfectionism, research has revealed some parallel aspects (Hill et al. 2004). According to Flett et al. (1995b), correlational analyses have indicated a strong association between the Concern over Mistakes subscale (Frost et al. 1990), and the dimensions of self-oriented perfectionism and other-oriented perfectionism (Hewitt & Flett 1991b). Enns and Cox (2002) found the socially-prescribed perfectionism dimension (Hewitt & Flett 1991b) to be most strongly associated with the Concern over Mistakes, Parental Expectations, Parental Criticism and Doubts about Actions dimensions (Frost et al. 1990). As Hill et al. (2004: 81) mentioned, the MPS of both Frost et al. (1990) and Hewitt and Flett (1991b) have dimensions relating to "high personal standards, concern about the approval of others regarding performance, and finding fault with oneself". Given this data, a new measurement scale for perfectionism was formulated. With the assembling of the Perfectionism Inventory, Hill et al. (2004) were inspired by subscales used by previous perfectionism measures. Six of the eight subscales are based on components from the two MPS's (Frost et al. 1990; Hewitt & Flett 1991b):

1. Striving for Excellence (Personal Standards: Frost et al.; Socially-Oriented Perfectionism: Hewitt & Flett)
2. Concern over Mistakes (Concern over Mistakes: Frost et al.)
3. High Standards for Others (Other-Oriented Perfectionism: Hewitt & Flett)
4. Need for Approval (Doubts about Actions: Frost et al.; Socially-Prescribed Perfectionism: Hewitt & Flett)
5. Organization (Organization: Frost et al.)
6. Perceived Parental Pressure (Parental Criticism, Parental Expectations: Frost et al.)
7. Rumination
8. Planfulness

Although the scales of Rumination and Planfulness are unique constructs of the Perfectionism Inventory, there are some correlations with the MPS (Frost et al.1990; Hewitt & Flett 1991b). Planfulness, defined as the "tendency to plan ahead thoughtfully and deliberately before making decisions" (Kennedy 2001), is strongly associated with the Personal Standards (Frost et al. 1990), Organization (Frost et al. 1990) and self-oriented perfectionism (Hewitt & Flett 1991b) subscales. The Rumination subscale was included on

account of the strong association between perfectionism and obsessive-compulsive rumination symptoms (Frost & Steketee 1997; Antony et al. 1998; Rhéaume et al. 2000; Kawamura et al. 2002). Correlations between Rumination and Concern over Mistakes (Frost et al. 1990), Doubts about Actions (Frost et al. 1990), Personal Standards (Frost et al. 1990), self-oriented perfectionism (Hewitt & Flett 1991b) and socially-prescribed perfectionism (Hewitt & Flett 1991b) supported its relevance in the Perfectionism Inventory.
These eight subscales of the Perfectionism Inventory are considered to provide an accurate combination of both previous scales and new developments in perfectionism studies.

2.2.8 Critique of the multidimensional approach to perfectionism

The multidimensional construct of perfectionism appears problematic from a clinical point of view. Shafran et al. (2002) mentioned that the multidimensional scales of perfectionism seem to assess a wider range of characteristics than those described by early theorists and clinicians. Related aspects, such as expecting or perceiving others to have high standards (other-oriented perfectionism, socially-oriented perfectionism) do not necessarily imply the individual's own desire for perfection. Similarly, dimensions such as Parental Criticism, Parental Expectations and Doubts about Actions may be more indicative of variables related to perfectionism. Perfectionism is more accurately presented by the dimensions of Personal Standards, Concern over Mistakes and self-oriented perfectionism, seeing that the "impact of mistakes on self-evaluation" is taken into account (Shafran et al. 2002: 777).

2.2.9 Limitations of previous studies

According to Stoeber and Childs (2011), the most limiting aspect of the study of perfectionism is the dearth of longitudinal studies "investigating the development of perfectionism in children and adolescents". More specifically, there is a need for studies examining the longitudinal effects of perfectionism on the emotional and physiological wellbeing and psychological adjustment of the individual. The majority of studies on perfectionism have been conducted on subject groups from North America (USA, Canada) and Western Europe. It is therefore not clear whether these findings are applicable to other cultures. However, two cross-cultural studies have been performed on North American/Croatian adolescents (Gilman et al. 2005) and German/Chinese adolescents (Essau et al. 2008). Both studies have found the positive associations between perfectionistic strivings and psychological adjustment, and between perfectionistic concerns and psychological maladjustment to be similar across cultures.

A further limitation includes researchers' scepticism about the adaptive nature of perfectionism. The clinical background of researchers like Burns (1980), Pacht (1984) and

Greenspon (2000) can account for their tendency to focus predominantly on the negative components of perfectionism and their consequent belief that perfectionism can only be maladaptive (Benson 2003). Nevertheless, there is sufficient evidence to support the underlying positive components of perfectionism (Terry-Short et al.1995; Rice et al. 1998; Lynd-Stevenson & Hearne 1999; Blankstein & Dunkley 2000).

2.3 Academic motivation

The Latin term for 'to motivate' is *movēre* and can be translated as 'to move'. Accordingly, one can interpret the study of motivation as the study of action (Eccles & Wigfield 2002: 110). Academic motivation can be explained as the psychological process underlying various patterns of achievement behaviour. It is therefore classified under 'achievement motivation', which is defined as a positive aspiration to compete and accomplish within superior standards (McClelland et al. 1953). The Self-Determination Theory (Deci & Ryan 2000; Ryan & Deci 2000) has proved effective in explaining motivation (Vansteenkiste et al. 2006). As shown in Figure 1, the Self-Determination Theory depicts motivation in terms of amotivation, extrinsic motivation and intrinsic motivation. Amotivation represents the lack or absence of drive. Extrinsic motivation consists of three components, namely external regulation, introjected regulation and identified regulation. Intrinsic motivation is divided into the components of to know, accomplishment and stimulation (Deci & Ryan 2000).

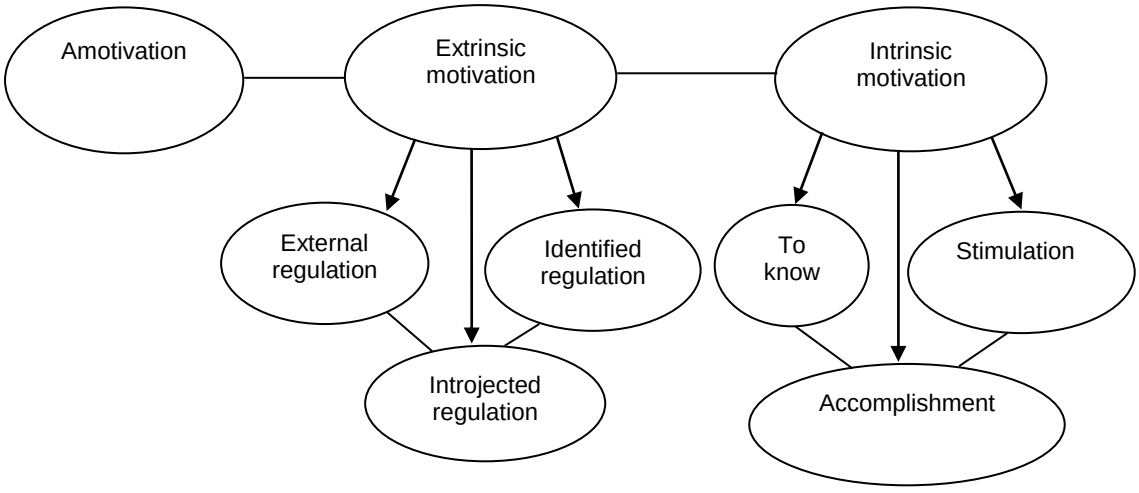

Figure 1: The motivational continuum of the Self-Determination Theory (Deci & Ryan 2000)

'External regulation' can be understood as the attempt to obtain an external reward for certain behaviour or to avoid punishment. 'Introjected regulation' refers to maintaining personal expectations or evading guilt. The last component of extrinsic motivation, 'identified regulation', includes appreciating the behaviour despite not necessarily liking it (Ryan & Deci 2000; Clark & Schroth 2010).

The intrinsic motivation 'to know' is defined as the enjoyment obtained from learning or trying to grasp something new through a specific behaviour. The intrinsic motivation 'to accomplish' refers to the satisfaction and feeling of competence gained from engaging in certain behaviour. Lastly, the intrinsic motivation to experience 'stimulation' is explained as engaging in behaviour with the belief that the actions will provide excitement and stimulation (Ryan & Deci 2000; Clark & Schroth 2010).

2.3.1 Key concepts in academic motivation research

Bong and Clark (2010) have explored the relationship between academic self-concept and self-efficacy, probably the two most well-researched and established constructs in academic motivation research. Self-concept refers to the collective self-perceptions formed through interpretations of the environment and evaluations by significant others (Shavelson & Bolus 1982). This multidimensional concept includes self-esteem, self-confidence, stability and self-crystallization (Rosenberg & Kaplan 1982). Self-efficacy can be understood as "an individual's judgments of his or her own capabilities to perform given actions" (Schunk 1991: 207). In comparing academic self-concept and self-efficacy, self-concept appears to be more complex, consisting as it does of a combination of cognitive and affective responses toward the self. Self-efficacy, on the other hand, includes mainly cognitive judgements of one's own abilities according to the criteria of mastery. The internal structure of both constructs appears to be multifaceted and hierarchical (Bong & Clark 2010).

2.3.2 Motivational theories

Academic motivation can be further clarified by considering the following motivational theories as categorised by Eccles and Wigfield (2002: 109-132):

Theories focused on expectancy

Expectancy theories focus on individuals' beliefs about their own capabilities and values, expectations of succeeding or failing, and the degree of control experienced over the outcomes.

- Self-Efficacy Theory

Bandura (1986: 391) defines self-efficacy as "People's judgments of their capabilities to organize and execute courses of action required to attain designated types of performances". The Self-Efficacy Theory consists of outcome expectations and efficacy expectations. The first focuses on the belief that a specific behaviour will lead to a certain outcome; the second considers whether one's behaviours will be sufficiently effective in

producing the required outcome. According to Bandura (1997: 2001), efficacy expectations play an important role in the choice of activity, goal setting and the individual's determination.

- Control Theories

According to the Control Theories, an individual's expectations of succeeding are determined by the extent to which they feel in control of their successes and failures. In addition to the established internal and external loci of control, Connell (1985) suggested a third category, unknown control. By this he proposed that someone's lack of awareness of the reasons for their successes and failures can undermine their motivation to engage in a related task. Connell and Wellborn (1991) proposed the incorporation of control beliefs with the three basic psychological needs of competence, autonomy and relatedness. Accordingly, "the amount of structure, degree of autonomy provided, and the level of involvement" determine the fulfilment of these basic needs (Eccles & Wigfield 2002: 111). Skinner et al. (1998) later elaborated on perceived control with their notion of means-ends beliefs, control beliefs and agency beliefs. Means-ends beliefs encompass the conviction that specific causes can lead to certain outcomes. Control beliefs refer to the individual's expectations that he/she can produce the required outcome, while agency beliefs are the anticipation that someone has access to the resources necessary to produce the desired results. All three beliefs influence the performance of achievement tasks (Eccles & Wigfield 2002).

Theories focused on the Reasons for Engagement

In contrast to the focus on the individual's performance, as emphasized by the theories of expectancy, the following theories are based on the individual's motive in participating in a task.

- Intrinsic Motivation Theories

Intrinsic motivation can be defined as the "inherent tendency to seek out novelty and challenges, to extend and exercise one's capacities, to explore, and to learn" (Ryan & Deci 2000: 70). In contrast, extrinsic motivation is explained as the involvement in an activity with the aim of attaining instrumental, material or other rewards (Eccles & Wigfield 2002: 112).

- Interest Theories

For research purposes, it is possible to distinguish between two types of interest: individual interest and situational interest. Individual interest is a "relatively stable evaluative orientation towards certain domains"; situational interest is an "emotional state aroused by specific features of an activity or task" (Eccles & Wigfield 2002: 114). Schiefele (1999) identified the

two components of individual interest: feeling-related valences and value-related valences. Feeling-related valences refer to the feelings of stimulation and involvement often associated with an activity or an object; value-related valences suggest the personal significance associated with an activity or an object. Research on individual interest focuses mainly on its relation to the quality of learning (Renninger et al. 1992; Alexander et al. 1994; Schiefele 1999). Moderate correlations between interest and text learning have been found. Schiefele has further demonstrated a stronger association with deep-level learning as opposed to surface-level learning. In contrast, situational interest is influenced by the characteristics of academic activities which create interest, innovation, activity level and clarity (Hidi & Baird 1986).

- Goal Theories

The Goal Theory is based on achievement goals and their link with achievement behaviour. Nicholls et al. (1990) identified two motivational goal orientations or behaviours: ego-involved goals entail maximising positive evaluation and minimising negative evaluations of capability; by contrast, task-involved goals are intended to increase competence through mastering tasks. Unlike Nicholls, Wentzel (1991, 1993) emphasizes the content of goals, rather than mastering and performing them. Wentzel has found that both social and academic goals correlate positively with school performance. Further studies (Wentzel 1994) have found that academic responsibility goals are negatively related to peer acceptance, but positively related to recognition by educators. However, academic prosocial goals, such as the shared learning between classmates, did show a positive correlation with peer acceptance.

Theories integrating Expectancy and Value Constructs

- Attribution Theory

Weiner's Attribution Theory (1985) holds that people's beliefs about the causes of success and failure influence the way in which future tasks are approached. Ability, effort, task difficulty and luck were identified as the most significant causes/attributes contributing to achievement (Weiner 1992). These aspects are divided into three causal dimensions: locus of control, stability and controllability. The locus of control dimension consists of an internal and an external locus of control; the stability dimension measures the degree of change within the various factors (attributions); and the controllability dimension distinguishes between factors that can be controlled (such as skill and efficacy) and those which cannot (such as ability and luck). Aspects of achievement behaviour are influenced by the related causal dimension (Weiner 1985; 1992). For example, the locus of control dimension shows the strongest association with affective reactions, while the stability dimension plays a role in the expectations of success.

- Expectancy-Value Theory

The Expectancy-Value Theory is based on the assumption that individuals' expectations and values can account for their choice, perseverance and performance in a specific task (Atkinson 1957; Eccles et al.1983; Wigfield 1994; Wigfield & Eccles 1992). Expectancies refer to the individual's beliefs on how well they will perform, while values are explained as the personal importance attached to an activity. According to Wigfield and Eccles (2000: 69), expectancies and values are possibly influenced by task-specific beliefs. These beliefs include "ability beliefs, perceived difficulty of different tasks, and individuals' goals, self-schema, and affective memories". In turn, these social cognitive variables are influenced by individuals' perception of how others view them, affective recollections and their personal interpretation of success (Eccles & Wigfield 2002: 118).

- Self-Worth Theory

According to Covington's (1992; 1998) Self-Worth Theory, academic competence is often used to attain a sense of self-worth. It was found that college students ascribe their success to ability and effort, while failure was explained by lack of effort (Covington & Omelich 1979). Students avoided citing lack of ability as the cause of failure. "Procrastination, making excuses, avoiding challenging tasks, and not trying" were strategies used in avoiding an apparent lack of ability (Covington 1992, in Eccles & Wigfield 2002: 123). Seeing that effort is necessary if success is to be achieved, it is highly encouraged. However, if an attempt leads to failure, the conclusion is that the individual lacks ability. This threatens both the individual's own perception of competence and others' conclusions as to their ability. For this reason, many individuals do not attempt a specific task if failure is the probable outcome (Covington & Omelich 1979; Covington 1992). Researchers such as Harter (1990; 1998) have reacted to Covington's (1992) theory by questioning the significance of academic competence. Harter argues instead that the self-concepts of physical appearance and social competence are more important in predicting self-worth. The capacity of a self-concept to determine one's self-worth is established by the value the individual attaches to a specific concept. Both Eccles (1993) and Harter (1998) have suggested that individuals may therefore reduce the worth they add to the tasks in which they expect to fail in order to maintain their sense of self-worth.

Theories integrating Motivation and Cognition

Researchers in this field emphasise both the conversion of motivation into regulated behaviour and the link between motivation and cognition (Eccles & Wigfield 2002: 124).

- Social Cognitive Theories of Self-Regulation and Motivation

According to Zimmerman (1989), self-regulation implies being metacognitively, motivationally and behaviourally active in the processes of learning and achieving. As a result, self-regulated students continuously engage in self-observation, self-judgement and self-reactions (Zimmerman 2000). If these reactions have a constructive effect, especially when it comes to response to failure, students are more likely to persist.

- Theories linking Motivation and Cognition

Studies are exploring possible relations between motivation, cognition and self-regulated behaviour (Borkowski & Muthukrishna 1995). Motivation should therefore be considered in cognitive processing terms: “Motivational thoughts and beliefs are governed by the basic principles of cognitive psychology, differing from other thoughts and beliefs only in their content” (Winnie & Marx 1989, in Eccles & Wigfield 2002: 125). Pintrich’s (2000a; 2000b) model consists of student entry characteristics; social aspects of the learning environment; various motivational constructs derived from expectancy-value and goal theories; and several cognitive constructs. Student entry characteristics include prior achievement levels, while social aspects of the learning environment consist of interactions between student and teacher. The motivational constructs involve expectancies, values and affect. Lastly, cognitive constructs include background knowledge and self-regulatory strategies (Eccles & Wigfield: 125). The motivational and cognitive constructs have been found to influence one another, and are additionally influenced by the social environment (Eccles & Wigfield: 126). Furthermore, it is believed that the cognitive and motivational constructs control students’ achievements by influencing their involvement in the learning process (Pintrich & De Groot 1990). In contrast with other research, Pintrich et al. (1993) propose that the influence of motivational factors and control beliefs on the modification of mental concepts has not yet been adequately established.

- Theories of Motivation and Volition

Volition is defined as “the strength of will needed to complete a task”, together with “the diligence of pursuit” (Corno 1993, in Eccles & Wigfield 2002: 126). Kuhl (1987) emphasized volition by claiming that motivation results only in the choice to act, whereas processes of volition determine whether the objective is reached. According to Kuhl (1987), volition strategies result in persistence, regardless of distractions and other challenges. These approaches include cognitive, emotional, motivational and environmental control strategies. According to Wigfield and Eccles (2000; 2001), cognitive control strategies consist of information processing, selective attention and encoding control, thereby enabling focus.

Emotional control strategies assist in managing depression and other restraining emotions. The motivational control strategies include reinforcing the drive for the current behaviour, and environmental control strategies comprised of directing the surroundings to assist the motivated behaviour. It was found that action-oriented individuals are more prone to drawing on these volition strategies than are state-oriented individuals (Kuhl 1987).

- Integrating theories of Self-Regulation and Expectancy-Value Models of Motivation

The central influence of efficacy beliefs on various self-regulation models (Rheinberg et al. 2000; Schunk & Ertmer 2000) was pointed out by Wigfield and Eccles (2001). This led to the notion of integrating theories of self-regulation and expectancy-value. According to this new hypothesis, the personal significance of the possible outcome is considered before the choice of whether or not to act is made (Eccles & Wigfield 2002: 127).

2.3.3 Key studies on academic motivation

Academic Motivation Scale (Vallerand et al. 1992)

The most prominent scale in the motivation literature is the Academic Motivation Scale (Vallerand et al. 1992). This scale is based on the theory of Self-determination (Ryan & Deci 2000), and therefore comprise of the following seven factors: the drive to know, to accomplish, and to experience stimulation (intrinsic motivation); external, introjected and identified regulation (external motivation), and amotivation.[6] However, Fairchild et al. (2005) evaluated this scale and found little evidence validating its simplex structure. The inter-relationships among bordering subscales did not display the hypothesized magnitudes and, as a result, the theory of a motivational continuum is questioned. The lack of evidence could indicate limitations in either the scale's construction or in its theoretical foundations.

The Work Preference Inventory (Amabile et al. 1994)

Rather like the Academic Motivation Scale (Vallerand et al. 1992), the WPI is based on the assumption that intrinsic and extrinsic motivation may coexist. By contrast, the WPI was designed directly to measure intrinsic and extrinsic motivation, not general causality orientations resulting in intrinsic and extrinsic motivation.

The WPI is comprised of 30 items divided into two primary scales (Intrinsic and Extrinsic Motivation), each consisting of 15 items. Each item is rated according to a four-point Likert Scale ranging from 1 (no agreement) to 4 (complete agreement). The Intrinsic Motivation scale is subdivided into the scales of Enjoyment and Challenge. The Extrinsic scale is

[6] See Figure 1, p. 39

divided into the Outward-scale and the Compensation-scale. Displayed below is a list of the four subscales with an item-example of each:

- Enjoyment: “I prefer to figure things out for myself.”
- Challenge: “I enjoy tackling problems that are completely new to me.”
- Outward: “I am strongly motivated by the recognition I can earn from other people.”
- Compensation: “I am strongly motivated by the grades I can earn.”

2.3.4 Perfectionism and motivation

For the past few decades, researchers such as Flett and Hewitt (Flett et al. 1994; Flett et al. 2002) have noted the possible influence of motivation on perfectionism. They assumed that self-oriented perfectionism is influenced by intrinsic motivation, while socially-prescribed perfectionism is associated with extrinsic motivation. More recent studies (Accordino et al. 2000; Mills & Blankstein 2000; Miquelon et al. 2005; Neumeister & Finch 2006) focusing on the influence of perfectionism on academic motivation will be discussed.

Accordino et al. (2000) considered the relationship of perfectionism to mental health, achievement and achievement motivation in adolescents. The sample group consisted of high school students, specifically students in Grades 10-12. Results suggested the personal standard dimension of perfectionism to be an important predictor of both academic and achievement motivation. Increased personal standards were related to decreasing depression and increasing self-esteem. A discrepancy between personal standards and actual performance was found to result in increasing depression levels and decreasing self-esteem.

Mills and Blankstein (2000) conducted a study on the perfectionism, intrinsic and extrinsic motivation and motivated learning strategies on the part of university students. In contrast with previous researchers (Flett et al. 1995b), Mills and Blankstein found their hypothesis that self-oriented perfectionists can be motivated by both intrinsic and extrinsic factors to be valid. In agreement with past studies, they associated socially-prescribed perfectionism with decreased levels of intrinsic motivation and increased levels of extrinsic motivation.

By elaborating on the results of Mills and Blankstein (2000), Miquelon et al. (2005) investigated the role of perfectionism, academic motivation and psychological adjustment difficulties in undergraduate students. Miquelon et al. speculated that self-oriented perfectionism assists self-determined (intrinsic) academic motivation, whereas socially-

prescribed perfectionism is enhanced by non-self-determined (extrinsic) academic motivation. Additionally, Miquelon et al. took the level of psychological adjustment difficulties into account. The final results delivered the following correlations: self-oriented perfectionism is related to a higher degree of self-determined academic motivation and lower levels of psychological adjustment difficulties; socially-prescribed perfectionism is associated with greater levels of non-self-determined academic motivation and psychological adjustment difficulties. This study indicates how the association of perfectionism with academic motivation contributes to psychological adjustment.

In the study by Neumeister and Finch (2006), the focus was limited to students with high ability. They discovered self-oriented perfectionism to be related to both mastery and performance goals. Mastery goals reflect an intrinsic drive to learn, whereas performance goals may involve extrinsic behaviours such as competitiveness and social comparison. Researchers such as Wong and Csikszentmihalyi (1991) and Pintrich (2000a; 2000b) propose the importance of both types of goals in the maintenance of motivation over time.

2.3.5 Motivation in music

The motivational aspect in music has been the focus of numerous studies (Austin 1988; Fortney 1992; Sandene 1997; Zdzinski 2002). Researchers have explored, inter alia, the correlations of motivation and attitude with age and gender, the prediction of performance achievement and students' perceptions of teaching. However, fewer studies have investigated the cognitive processes underlying motivation in the context of musical performance (McPherson & McCormick 1999).

Tinto (1993) investigated factors contributing to the persistence and drop-out rate among tertiary students. He found that goals, commitments, expectations and aspirations prior to tertiary enrolment are influenced by the family background, skills, abilities and earlier education of the students. Later goals and commitments, and consequently the choice to persist or withdraw from tertiary studies, are influenced by the extent to which educational and social expectations are met. Tinto theorised that the lack of academic and social integration, which leads to incongruence between the needs, expectations and interests of the students, may decrease their academic motivation and willingness to continue their studies. Hallam (2002) created a new model of musical motivation based on Tinto's theory. Accordingly, the motivation to actively participate in music is determined by complex interactions between individual characteristics of the student and various environmental factors (Figure 2). Characteristics of the individual include personality, self-concept and goals, while environmental factors refer to society, culture, institutions, family and peers.

Hallam's aim with this model is to determine the extent to which these factors interact to "generate or reduce enthusiasm for and commitment to music" (2002: 239).

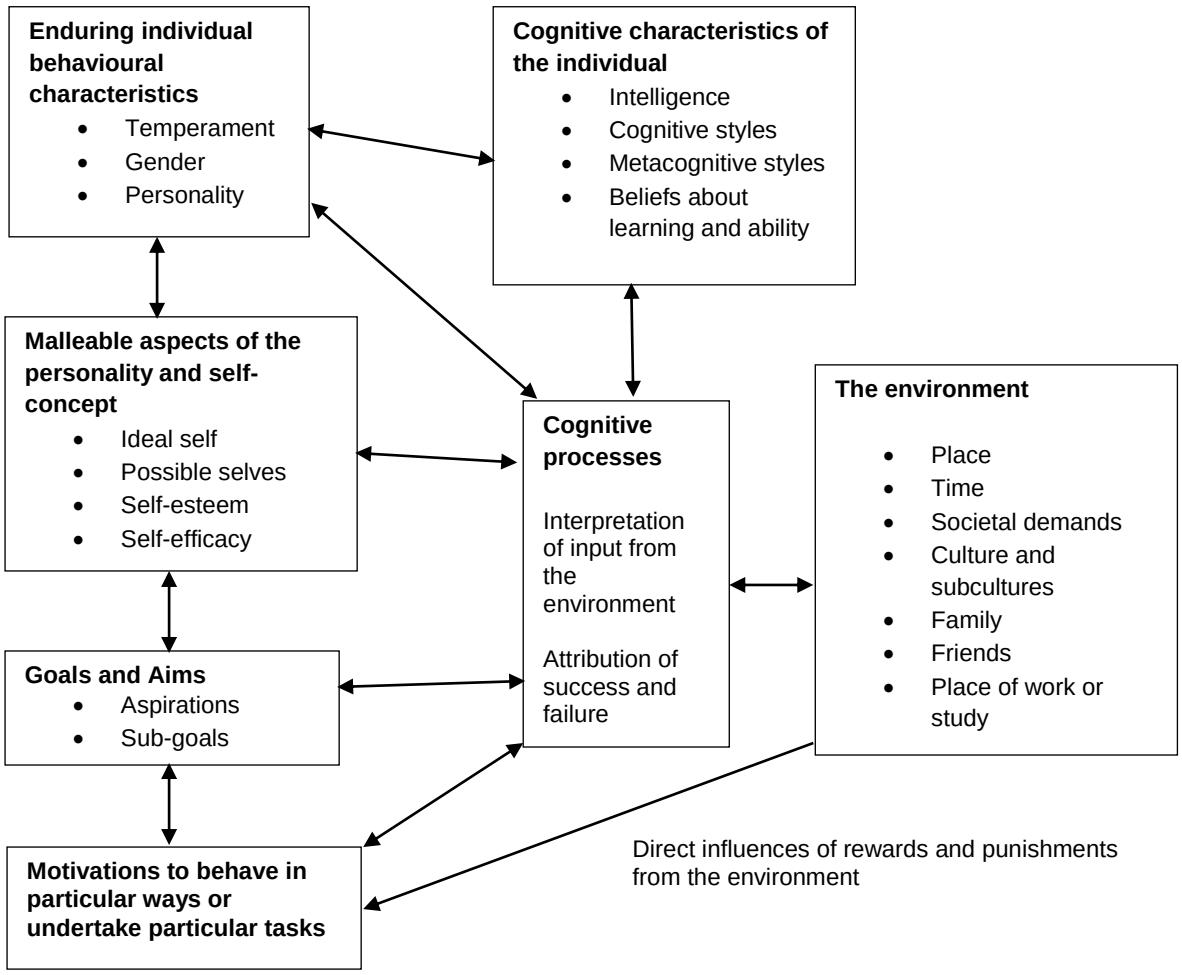

Figure 2: Interactions between individual and environmental factors in determining motivation (Hallam 2002: 233)

In 1995, Asmus suggested that motivation was responsible for 20% of the variance in musical achievement and associated behaviours, but the evidence supporting this proposition is inconsistent. Research by Asmus (1986), McCormick and McPherson (2003) and Schmidt (2005) will be discussed to demonstrate the variety of findings dealing with motivation in music.

Asmus (1986) employed the Attribution Theory[7] in understanding the reasons why some students succeed in music, and others do not. The study found that students are more likely to attribute internal reasons for both success and failure in music. Success in music was

[7] Refer back to p. 42.

mostly accredited to stable attributions, while failure was ascribed to external-unstable causes. Contrary to expectations, more female than male students made use of internal-stable attributions. Other surprising results included the increasing frequency of internal-stable attributions together with the decreasing frequency of internal-unstable attributions as the school grade level increased. The school attended also proved to have an influence on the attributions, indicating possible influence by teachers.

The role of self-efficacy in a practical music examination was explored by McCormick and McPherson (2003). The study involved 332 instrumentalists performing a Trinity College examination. It was found that, although the amount of practice is crucial in predicting performance success, self-efficacy was the best predictor of actual performance in terms of motivational values. Accordingly, success in performance in a practical examination can be ascribed to a combination of self-efficacy and the number of hours spent practising.

Schmidt (2005) re-examined academic achievement motivation in instrumentalists and explored links between achievement motivation, performance achievement and music experience variables. Three aspects of motivation were revealed in factor analysis. These were learning/task orientation, performance/ego orientation and individual orientation. Learning/task orientation correlated positively with practice time, ratings of performance and effort, solo performance, private-lesson experience and the grade level achieved. Performance/ego orientation correlated negatively with both the grade level and the solo performance rating. The individual orientation factor showed positive correlations with performance, effort and solo performance ratings. In general, the participants in the study used mastery and cooperative orientations rather than competitive and ego orientations for defining their success. The instrumentalists therefore responded better to the intrinsic and cooperative dimensions of music as opposed to extrinsic and competitive dimensions. It is worth noting that students' ratings of their own performance correlated positively with teachers' ratings, confirming previous research (May 2003) stating that music students' self-evaluations of their performance skills are similar to ratings by external observers.

2.3.6 Parents and motivation

Parents are important external influences in the motivation of students. From an early age, children assess their own abilities according to the feedback they receive from their parents (Wigfield et al. 1997). Parental assessment and feedback have been found to be greater determinants of a child's self-perception than academic grades and teacher's evaluations (Frome & Eccles 1998; Wigfield et al. 1997). From a music educational perspective, Hallam (2002) and Sichivitsa (2007) found that parental support is not a prerequisite for students to

develop an interest in music. However, the presence thereof may contribute positively to children's motivation to pursue and persevere in musical activities.

2.3.7 Limitations

Bong (1996: 162) has identified difficulties within the field of academic motivation research. Regardless of the numerous theories discussed above, the predominant challenge remains the need for models "capturing the full dynamics underlying observed behaviors". This lack of integration may be due to researchers' preference for one dimension of academic motivation, while discounting valid aspects included in other theories.

2.4 Music performance anxiety

The phenomenon of music performance anxiety was first identified by Simon and Martens in 1979. In their study comparing anxiety in the performance contexts of sports, academic tests and music, they found that solo musical performances delivered the highest levels of anxiety. The widespread occurrence of music performance anxiety has been indicated by several studies revealing its presence in a variety of musicians, ranging from children to professionals (Kenny et al. 2004; Osborne & Kenny 2005; Boucher & Ryan 2011). This supports Kenny's (2009) proposition that music performance anxiety is not completely dependent on years of experience or the level of musical expertise. Studies exploring the prevalence of music performance anxiety deliver varying statistics, suggesting that 20 % - 47 % of musicians experience performance anxiety, the majority of them female (Fishbein et al. 1988; Wesner et al. 1990).

2.4.1 Definition of music performance anxiety

Kenny (2009: 433) suggests the following definition for music performance anxiety:

> Music performance anxiety is the experience of marked and persistent anxious apprehension related to musical performance that has arisen through underlying biological and/or psychological vulnerabilities and/or specific anxiety-conditioning experiences. It is manifested through combinations of affective, cognitive, somatic, and behavioral symptoms. It may occur in a range of performance settings, but is usually more severe in settings involving high ego investment, evaluative threat (audience), and fear of failure.

2.4.2 Phenomenology of music performance anxiety

Music performance anxiety usually occurs as an isolated disorder affecting only one domain of the individual's life, namely music performance. However, a third of cases have displayed the occurrence of comorbid disorders, most often generalised anxiety disorders (Sanderson

et al. 1990). Other co-occurring disorders can include social phobia and even clinical depression (Kessler et al. 1999). Lazarus and Abramowitz (2004) suggest that the identification and treatment of underlying comorbid disorders can result in the alleviation of music performance anxiety symptoms.

2.4.3 Factors contributing to music performance anxiety

Several researchers have considered the possible origins of music performance anxiety. Kenny (2006) proposes the following six causes for this performance anxiety in the individual: innate temperament; over-active cognitive capacity and self-reflective function; parenting and other interpersonal experiences; perception and interpretation of the world; technical skill and mastery; and specific positive and negative performance experiences. Wilson (1999) has ascribed music performance anxiety to the fear of negative evaluation, general anxiety, high stress levels and situational factors. These include solo performance settings, performances in general, a competitive environment, levels of difficulty of pieces and preparation. Chan (2011: 28-36) conducted an analysis of existing literature and found music performance anxiety to be influenced by the following factors:

- Self-esteem

High levels of music performance anxiety are most frequently ascribed to the variable of self-esteem. Studies by Ryan (1998), Sinden (1999) and Chan (2011) have confirmed the negative correlation between music performance anxiety and levels of self-esteem.

- Gender differences

Gender as a contributing factor to music performance anxiety has been thoroughly studied. Ryan (2004) discovered interesting gender differences in reactions to music performance anxiety, whereby girls displayed greater changes in physiological measures, while boys exhibited more anxious behaviours. A study by Kokotsaki and Davidson (2003) found a strong positive correlation between state and trait anxiety levels in female music students, suggesting that those with higher levels of general anxiety also displayed higher levels of music performance anxiety.

- Personality

Concurring with the findings by Kokatsaki and Davidson (2011), Kenny et al. (2004) concluded that trait anxiety is closely related to music performance anxiety. Aspects of perfectionism, specifically those relating to competence, were found to be associated with higher levels of cognitive anxiety (Koivula et al. 2002).

- Situations

Situational factors playing a role in the occurrence of music performance anxiety include solo performance and audience size. Performing solo delivered higher levels of anxiety than did performing in a group (Simon & Martens 1979). Further, Ryan (2004) and LeBlanc et al. (1997) suggested the size of the audience group to be positively related to the levels of performance anxiety.

- Parenting styles

The relation between parenting styles and trait anxiety levels in children remains controversial. McLeod et al. (2007) have found parenting style to be responsible for only a 4% variance in children's anxiety levels. In contrast, Chorpita (2001), Besharat (2003) and Wood et al. (2003) suggest a clear relation between negative parenting styles and childhood anxiety. Besharat suggests a strong association between parental perfectionism and test anxiety in high school children.

- Technical skills and experiences

Paulman and Kennelly (1984) investigated the possibility that test anxiety was a result of skills deficit. In considering test-taking skills and performance experience, they concluded that well developed test-taking skills could compensate for anxiety-related deficits. However, these deficits do influence performance-ability as the level of difficulty increases. It is therefore important to note that, although skills can compensate for the effects of performance anxiety, they cannot be considered the main causal factor of music performance anxiety (Chan 2011).

- Occupational stress

Musicians tend to have higher anxiety levels than their non-music counterparts (Kemp 1981; Watson & Valentine 1987; Kokotsaki & Davidson 2003). The reason for this may be the nature of practising music as an occupation – the lengthy periods of time spent practising, the stress caused by unemployment and the demands on a performing musician can contribute to higher anxiety levels (Kenny et al. 2004). Schulz (1981) hypothesises that the individual can maintain intense concentration for 20-30 minutes. The fact that orchestra musicians often have to play for 2-3 hours means that they must experience considerable stress. Other factors include adapting to consistent loudness levels and poor lighting.

2.4.4 Development of music performance anxiety

Performance anxiety is regarded as an unfolding process consisting of pre-performance, during-performance and post-performance conditions. Figure 3 illustrates the progression of anxiety in a musical performance context (Papageorgi et al. 2007):

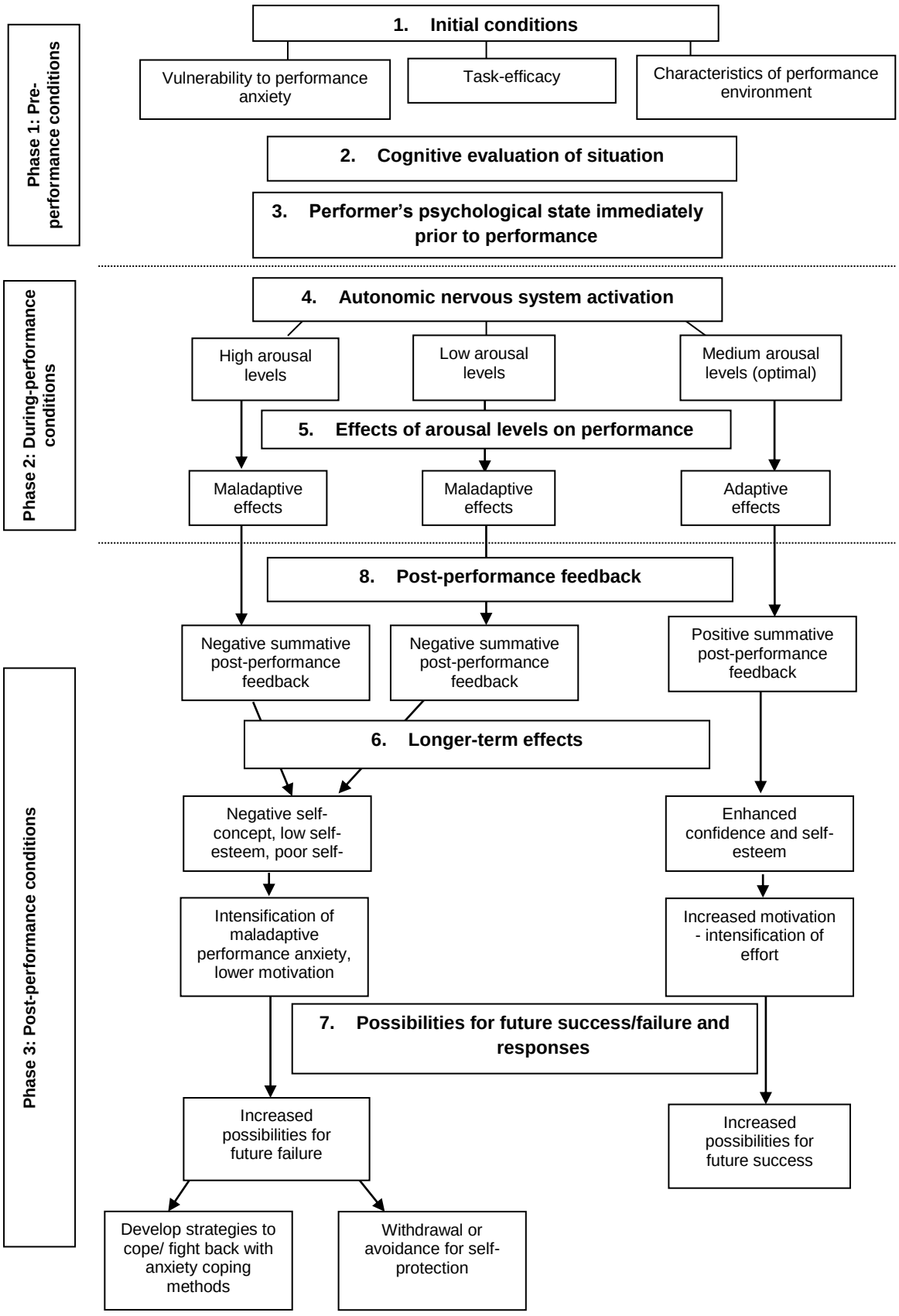

Figure 3: A conceptual framework for music performance anxiety (Adapted from Papageorgi et al. 2007: 94)

The pre-performance conditions (phase 1) consists of three sub-phases: initial conditions; cognitive evaluation of the situation; and the performer's psychological state immediately prior to performance. The initial conditions are explored in terms of the musician's vulnerability to experiencing performance anxiety; the task efficacy of the performer; and the specific characteristics of the performance environment. Papageorgi et al. (2007: 95) suggests that the interactions between these three elements "define the quality of a performer's cognitive evaluation of the performance and their psychological state immediately prior to the event". High levels of anxiety can therefore result from a high vulnerability to anxiety, perceptions of low task efficacy and a threatening performance setting. In contrast, low vulnerability to anxiety, high levels of task efficacy and a performance environment with limited threatening aspects may lead to increased motivation for success and controlled levels of anxiety.

The second sub-phase involves the cognitive evaluation of the performance situation. It consists of two appraisal processes – primary and secondary. Primary cognitive appraisal of the performance includes assessing the situation. Secondary cognitive appraisal involves judging the available resources for mastering the potential threat or enabling possible benefits. Assessment of the situation and the resources will determine the performer's emotional reaction prior to the performance (sub-phase 3). As Papageorgi et al. (2007: 96) has mentioned: "The quality of the psychological state is a direct result of an interaction between these two stages of appraisal".

The second phase of performance anxiety, the during-performance phase, is divided into autonomic nervous system activation (sub-phase 4) and the effects of arousal levels on performance quality (sub-phase 5). While the musician performs a piece in a specific psychological and emotional state, the autonomic nervous system is activated, resulting in high, low or moderate levels of physiological arousal. It is, however, important to be aware of the reciprocal relationship between sub-phases 3 and 4. This relationship is indicative of the affective state's relation to the autonomic nervous system, as well as the influence of the somatic arousal on further psychological distress. Sub-phase 5 is illustrative of the influence of the arousal level on the quality of musical performance. Low arousal levels may lead to poor concentration and physical activation, while high arousal levels can result in the over-activation of mental and physical resources. The optimal levels of arousal (medium arousal) are characterised by improved performance efficiency, alertness and concentration (Hamann 1982; Gates & Montalbo 1987; Kemp 1996; Wilson 2002).

The post-performance conditions, known as the third phase in the conceptual model of music performance anxiety, include post-performance feedback (sub-phase 6), longer-term effects (sub-phase 7) and possibilities for future success or failure and responses (sub-phase 8). Post-performance feedback refers to both the interpersonal and intrapersonal feedback on the quality of performance. Interpersonal feedback consists of comments from external sources, whereas intrapersonal feedback is an internal, self-monitoring process. Furthermore, the feedback can be regarded as summative, as it refers to the post-performance context. Hallam (2003) has indicated that the feedback after an event may influence the individual's attitude towards future performances, thereby contributing to the performance anxiety experienced during upcoming performances (sub-phase 1). The longer-term effects in sub-phase 7 are determined by the nature of the post-performance feedback. Negative summative feedback will in all likelihood result in a negative self-concept, low self-esteem, low self-efficacy beliefs and anxiety under similar conditions, thus determining the vulnerability to anxiety in sub-phase 1. Lastly, the possibility for future success or failure is determined by the individual's choice of reaction, as the fight-reaction can encourage dealing with the anxiety, and the flight-reaction can result in avoiding and withdrawing from future performances.

2.4.5 Symptoms of music performance anxiety

Music performance anxiety can manifest as physiological responses, cognitive activity and behavioural responses (Gabrielsson 1999). Similarly, Martens et al. (1990) identified both somatic anxiety and cognitive anxiety as components of music performance anxiety.

- Physiological responses (Somatic anxiety)

Evidence points to the arousal of the sympathetic nervous system as a result of music performance anxiety. Symptoms include: "an increase in heart rate and respiration; a dry mouth; sweaty palms; excessive tension in the hands, fingers, face, and throat; 'butterflies in the stomach'; tremors; cold hands; urinary urgency..." (Gabrielsson 1999: 569). These symptoms are indicative of the 'fright-flight-fight' response (Cannon 1925) activated by the release of adrenaline (epinephrine) and noradrenaline (norepinephrine) (Gleitman et al. 2004).

- Cognitive activity (Cognitive anxiety)

Individuals tend to display a cognitive style of thinking which includes the following thoughts: negative expectancies prior to a performance; negative prejudice in the retrospective self-evaluations of their performance; the perception that the audience will react negatively to their performance; unrealistic concerns about the consequences of a poor performance; high

awareness of changes in the reaction of the audience; and the inability to be satisfied regardless of evidence pointing towards a skilful performance (Wallace & Alden 1997).

- Behavioural responses

The symptoms manifest according to the requirements of the specific instrument of performance. Among vocalists, quavering voices are common, while string players can experience trembling bow hands (Gabrielsson 1999).

2.4.6 Measurement of music performance anxiety

There are a number of ways to evaluate music performance anxiety, ranging from measuring the heart rate and brain wave activity to conducting interviews (Hodges 2010). Self-report questionnaires are frequently used. A discussion of the various self-reporting measurement instruments follows:

The Music Performance Anxiety Scale (Cox & Kenardy 1993)

The Music Performance Anxiety Scale consists of 20 items rated according to a five-point Likert Scale. The general affective, cognitive, somatic and behavioural symptoms of performance anxiety are taken into account.

Performance Anxiety Inventory-Revised (Rae & McCambridge 2004)

Rae and McCambridge revised the PAI (Nagel et al. 1989), which consists of 20 items rated according to a four-point Likert Scale. In order to ensure both relevance to the performance context, and applicability to Northern Ireland-students (as opposed to an American context), Rae and McCambridge narrowed the statements down to 11 items. The writers maintained the four-point Likert Scale, measuring as 1 (almost never), 2 (sometimes), 3 (often) and 4 (almost always). Stoeber and Eismann (2007) altered and extended the scale to a six-point Likert Scale, ranging from 1 (never) to 6 (always). The current study has also made use of the altered and extended Rae and McCambridge scale similar to that of Stoeber and Eismann.[8]

Kenny Music Performance Anxiety Inventory (Kenny et al. 2004)

Barlow (2000) considered anxiety from the perspective of the Theory of Emotion. According to this theory, anxiety can be grasped only if the nature of emotion is fully appreciated (Barlow 1988). Kenny et al. (2004) developed the Kenny Music PAI to assess the validity of Barlow's theory. The 26 items were selected according to the four theoretical components of

[8] A more detailed discussion is included in Chapter 3, p. 65-66.

the Theory of Emotion: the evocation of anxious propositions; attentional shift; physiological arousal; and memory bias. A seven-point Likert Scale is used.

The Music Performance Anxiety Inventory for Adolescents (Osborne & Kenny 2005)

The lack of measurement instruments for anxiety in young people was addressed by Osborne and Kenny (2005) in the design of the Music Performance Inventory for Adolescents. The 18-item inventory is inspired by the scales of Nagel et al. (1989) and Cox and Kenardy (1993). The somatic, cognitive and behavioural components of music performance anxiety are assessed, using a seven-point Likert Scale.

2.4.7 Performance anxiety and quality of performance

The Yerkson-Dodson law suggests a symmetrical, inverted U-shape relationship between general anxiety and performance. Applying this law to music, poor quality of performance will result from very low levels of music performance anxiety, with the best performance occurring at moderate levels of anxiety. With further increasing anxiety levels, the quality of performance will progressively decrease (Hardy & Parfitt 1991). However, the inverse U-hypothesis has been criticised by various researchers. Wilson (1999) points out that trait anxiety, levels of task mastery and the degree of situational stress should be taken into account. According to Kenny (2011), the achievement of optimal performance is more complicated than the Yerkson-Dodson law illustrates. It is important to note that each individual as a performer differs in the level of arousal required for the optimal performance (Salmon 1990). Individuals with high trait anxiety will therefore require lower levels of arousal than those with low trait anxiety. Steptoe and Fidler (1987) found that increased anxiety can, under certain conditions, facilitate performance, especially for performers with high task mastery, which is associated with better adjudicator ratings.

2.4.8 Treatment for music performance anxiety

Various treatment options have been suggested to aid the anxious performer. The effectiveness of many of these options has not yet been proved (Kenny 2011). Treatments include prescribed medication, meditative techniques, physiologically- based interventions, relaxation techniques, cognitive behavioural therapies, music therapy, physical activity and psychotherapy (Nagel 2004; Kenny 2011; Wristen & Fountain 2013). Pharmacological treatments vary from antidepressants to beta-adrenergic receptor blockers (beta-blockers). Although medication can help alleviate the physiological symptoms of anxiety, the solution is only temporary, as the underlying psychological causes remain untreated. The combination of medication with other forms of treatment is therefore strongly recommended. A recent

study by Wristen and Fountain (2013) found an important correlation between physical activity and decreased levels of performance anxiety among university music students.

2.4.9 Perfectionism and (performance) anxiety

A number of theorists have examined the connection between perfectionism and anxiety (Borkovec et al. 1986; Carver & Scheier 1986; Higgins 1987). The general suggestion is that individuals with perfectionistic standards demonstrate a noticeable inclination towards anxiety. More specifically, Antony et al. (1998) confirmed the presence of perfectionistic traits across various anxiety disorders. Social phobia displayed positive correlations with the Concern over Mistakes, Doubts about Action, Parental Criticism and socially-prescribed dimensions of perfectionism. Obsessive-compulsive disorder manifests higher levels of Doubts about Actions dimension, and panic disorder showed a moderate link with increased levels of Concern over Mistakes and Doubts about Actions. When it comes to performance anxiety, Mor et al. (1995) and Kenny et al. (2004) focused specifically on anxiety and perfectionism in musicians in the milieu of performance.[9]

Mor et al. (1995) explored whether perfectionism and personal control are associated with debilitating and facilitating performance anxiety among professional performers. The results indicated that higher levels of self-oriented perfectionism and socially-prescribed perfectionism are associated with a greater degree of debilitating anxiety and lower degrees of both facilitating anxiety and personal control.

Kenny et al. (2004) considered the influence of the working environment on anxiety levels. The study explores the inter-relationships between state and trait anxiety, occupational stress, perfectionism, aspiration and music performance anxiety in professional opera singers. Results include higher levels of trait anxiety, occupational role concerns and occupational personal strain among the artists. Furthermore, a positive relation was found between personal resources and levels of trait anxiety, suggesting the use of resources to control anxiety. Higher trait anxiety also displayed a positive correlation with occupational personal strain. However, anxiety levels showed no connection with occupational roles or aspects of the physical working environment. Kenny et al. (2004: 757) interpreted the results as follows: “[W]hile trait anxiety and music performance anxiety were closely associated, occupational stress makes a separate contribution to the quality of working life experienced by elite choral artists”.

[9] Refer back to p. 32-34.

2.4.10 Motivation and anxiety

Concerning the connection between motivation and anxiety, research by Struthers et al. (2000) was found to be applicable. The study examined whether academic coping style and motivation mediated academic stress and performance in college students. The two coping strategies identified included problem-focused coping and emotion-focused coping. Problem-focused coping operates on the belief that the individual can change his/her situation and includes thoughts, actions and strategies aimed at removing or alleviating the impact of a stressful event. Emotion-focused coping consists of thoughts, actions and strategies aimed at managing and reducing distressing emotions (Folkman & Lazarus 1980). Struthers and colleagues suggested that both problem-focused coping and motivation influence the relation between academic stress and course grade (in students), whereas emotion-focused coping displayed no influence on this association. Students engaging in problem-focused coping were found to perform better academically and have higher levels of motivation compared to those engaging in emotion-focused coping. Furthermore, increased academic stress correlated with lower course grades (Struthers et al. 2000).

2.5 Related research

The association between perfectionism, motivation and anxiety is not a new concept in research. Studies by Stoeber and Eismann (2007) and Stoeber et al. (2009) have considered the correlation between these variables.

Stoeber and Eismann (2007) found perfectionism to play a significant role in the motivation, effort, achievement and distress in young musicians. The dimensions of perfectionism – striving for perfection, negative reactions to imperfection, perceived parental pressure and perceived teacher pressure – did, however, differ in their contribution to and influence on the variables. Positive correlations were found between striving for perfection and intrinsic motivation, and between negative reactions to imperfection and extrinsic motivation. Further results include correlations between striving for perfection and increased effort and achievement. Negative reaction to imperfection displayed positive relationships with performance anxiety, emotional fatigue and anxiety-related somatic symptoms, indicating a positive correlation between the negative aspects of perfectionism and distress.

In 2009 Stoeber, Feast and Hayward considered the correlation of self-oriented and socially-prescribed perfectionism with intrinsic motivation, extrinsic motivation and test anxiety in university students. The study delivered results similar to those of the research by Stoeber and Eismann (2007). Positive correlations were found between self-oriented perfectionism and intrinsic motivation, and between socially-prescribed motivation and extrinsic motivation.

Furthermore, socially-prescribed perfectionism displayed a positive association with test anxiety, interference and lack of confidence. Self-oriented perfectionism correlated positively with worry, and, as expected, displayed negative correlations with interference and lack of confidence. The ambivalent nature of self-oriented perfectionism in the examination setting is therefore illustrated by its association with both higher (amount of worrying) and lower (interference and lack of confidence) levels of anxiety.

Other studies on related topics include McQuade (2008) and Per Villiers (2009). McQuade considered the associations between performance anxiety, perfectionism, optimism and self-efficacy in students of the performing arts. Results confirmed the negative correlation between performance anxiety and both optimism and self-efficacy. No significant associations were found between perfectionism and performance anxiety, indicating the need for future research. The study by Per Villiers (2009) explored the association between social anxiety and perfectionism by comparing students of mathematics and physics with music and communication students. Music students showed the lowest level of social anxiety while testing the same as the other three groups on perfectionism.

2.6 Summary

Students will inevitably manifest perfectionism in some way or another during their music careers. Perfectionistic tendencies may sometimes motivate and influence students' approach to their studies, and music performance anxiety can develop as a result. The debilitating impact of anxiety on the quality of performance cannot be ignored. After considering the relevance of perfectionism, academic motivation and performance anxiety to musicians' lives, the need to study these traits in music students in the South African tertiary context became even more obvious.

CHAPTER 3

Research design and methodology

3.1 Introduction

This chapter considers the research design and methodology used in the study. Firstly, the methodology is discussed according to the cross-sectional survey design, the various measurement instruments used and the pilot testing thereof, the sampling design and participant selection, and the data collection process. Thereafter, the statistical procedure surrounding the validity and reliability of the questionnaire is considered. The chapter ends with a discussion of the relevant ethical aspects of the research. Figure 4 presents a general schematic presentation of the research process.

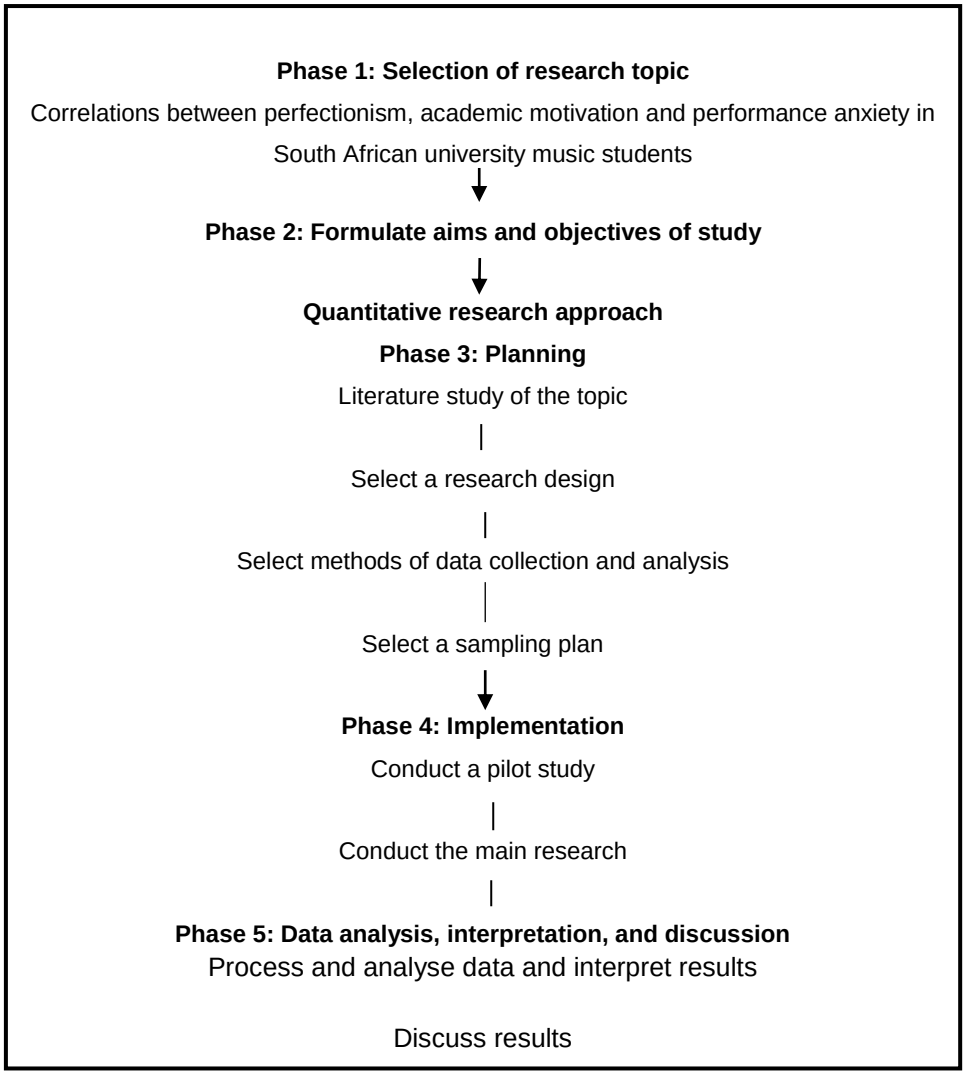

Figure 4: Schematic presentation of the research process (Adapted from Fouché & Delport 2012: 70)

3.2 Research design

In order to explain the relationships between the variables of perfectionism, academic motivation and performance anxiety, a quantitative approach was followed. Quantitative research is defined as the "inquiry into a social or human problem, based on testing a theory composed of variables, measured with numbers and analysed with statistical procedures in order to determine whether the predictive generalisations of the theory hold true" (Fouché & Delport 2012: 64).

After considering the various experimental and non-experimental quantitative research designs, the use of a survey design was found to be applicable. Leedy and Ormrod (2005: 183) describes the design as follows: "The researcher poses a series of questions to willing participants; summarizes their responses with percentages, frequency counts, or more sophisticated statistical indexes; and then draws inferences about a particular population from the response of the sample". A survey is considered to be the most frequently used non-experimental research method (Fouché et al. 2012) and is divided into two types: a descriptive survey obtains information used to describe the data, whereas an analytical survey investigates the relationships between variables. This study employs an analytical survey, and more specifically a randomised cross-sectional design. Several groups of music students are examined at a single point in time in order to determine the presence and degree of correlations between perfectionistic tendencies, motivational drives and anxiety levels within participants (Fouché et al. 2012: 156).

3.3 Sampling

3.3.1 Participant selection

The sample group was drawn from a target population of first, second and third year BA (Music) and BMus students from four South African universities. The non-probability sampling method of purposive sampling was conducted by selecting volunteering first, second and third year music students from both the BA (Music) and BMus degree. Participants were from the North-West University, Stellenbosch University, University of Pretoria and the University of the Free State. Purposive sampling can be defined as a sampling method in which "individuals are selected due to them belonging to a pre-defined group" (Wilson & MacLean 2011: 165).

The study aimed to include music students from a variety of cultural and demographic backgrounds. Taking the size of the music departments into account, it was decided to contact the North-West University, Rhodes University, Stellenbosch University, University of

Cape Town, University of Pretoria and the University of the Free State. Four of the six departments were willing to participate, and the sample group was assembled accordingly.

3.3.2 Participant recruitment

The HOD's of the universities were contacted via email explaining the aim of the study and the procedures involved.[10] Once feedback from four of the music departments was received, each of the university's Ethics Committee was approached for permission to conduct research at their institutions. After written approval was obtained, a suitable date for data collection was arranged.[11] North-West University was the first department scheduled for data collection - 32 students participated in the study. Thereafter 21 participants from Stellenbosch University, 24 students from the University of Pretoria and 16 students from the University of the Free State took part in the study.

3.4 Measurement instruments

The study made use of a questionnaire consisting of three existing standardised research instruments: MPS by Frost et al. (1990); WPI (Amabile et al. 1994) and PAI-R by Rae and McCambridge (2004). The questionnaire consists of four sections.

3.4.1 Section A: Biographic information

Section A contains a series of questions exploring the participants' demographic and academic background. Questions focus on the gender, first language, year of study, type of music degree, main instrument and academic institution of the student.

3.4.2 Section B: Multidimensional Perfectionism Scale

In deciding on a suitable scale/questionnaire for perfectionism, I researched two popular measures, one by Frost et al. (1990) and the other by Hewitt and Flett (1991b).
After careful consideration I decided to use Frost et al. (1990).[12]

The Frost MPS is included in this study mainly due to the focus of its dimensions. In comparison, a similar scale by Hewitt and Flett (1991b) conceptualises perfectionism as a broader concept, as dimensions include self-oriented perfectionism, socially-prescribed perfectionism and other-oriented perfectionism. The emphasis of Hewitt and Flett's scale is

[10] See Appendix 2 for information letter and informed consent.
[11] See Appendix 3 for approval letters and confirmation from the various institutions.
[12] The final Multidimensional Perfectionism Scale contained two items from the Burns Perfectionism Scale (items 4 and 10), four items from the EDI (Garner et al. 1983; items 15, 18, 19 and 20) and three items from the MOCI (Rachman & Hodgson 1980; items 17, 28 and 32). The majority of the items were newly formulated. The scale was validated by using reliability and factor analyses. The factor scores of Frost's final scale indicated adequate reliability.

on the direction of perfectionism, whereas the instrument of Frost and his colleagues focuses more on the specific characteristics and traits related to perfectionism. As perfectionism will be compared with motivational tendencies and anxiety levels, the trait-like focus of perfectionism, as employed by Frost et al. (1990), was found to be more appropriate.

Section B of the questionnaire therefore includes the MPS by Frost et al. (1990). This scale consists of 35 questions measuring the six dimensions of perfectionism: Concern over Mistakes; Personal Standards; Parental Expectations; Parental Criticism; Doubts about Actions; and Organization. A five-point Likert Scale – from 1 (strongly disagree) to 5 (strongly disagree) is used.

3.4.3 Section C: Work Preference Inventory

Section C consists of the WPI (Amabile et al. 1994) which measures both Intrinsic and Extrinsic Motivation. Intrinsic Motivation is divided into the dimensions of Enjoyment and Challenge, and Extrinsic Motivation consists of the Outward-scale and Compensation-scale. Motivation is therefore considered in terms of these four subscales. The inventory includes 30 items which are rated according to a four-point Likert Scale – varying from 1 (never true of me) to 4 (always true of me). The scale can be used for both working adults and university students, with the wording of the items differing slightly.

The majority of motivational scales are designed according to the notion that intrinsic and extrinsic motivation are distinct, and often opposing constructs (Lepper & Green 1978). Deci and Ryan (1985b) reasoned differently and believed that intrinsic and extrinsic motivation can indeed coexist. Amabile et al. (1994) agrees with Deci and Ryan (1985a,b), however, whereas Deci and Ryan (1985a; 1985b) considered the causal orientations of motivation, the WPI was created to directly assess “individual differences in the degree to which adults perceive themselves to be intrinsically and extrinsically motivated toward what they do” (Amabile et al. 1994: 952). In addition to self-perceptions and self-determination, the WPI also include emotions and cognitions underlying intrinsic and extrinsic motives.

3.4.4 Section D: Performance Anxiety Inventory

The last part of the questionnaire, Section D, consists of the Performance Anxiety Inventory (PAI-R) as revised by Rae and McCambridge (2004). The PAI was originally created by Nagel et al. (1981) for the measurement of performance anxiety in musicians during recitals. The instrument was revised in order to accommodate a practical exam context. The original scale consists of 20 items, while the revised version is narrowed down to 11 items. The

modification is based on two factors – some items could not be easily adapted from a recital to a practical exam context, and some of the American terminology, as originally employed by Nagel and colleagues, could not be applied to a setting outside of the USA. The PAI-R makes use of a four- point Likert Scale – 1 (almost never), 2 (sometimes), 3 (often), and 4 (almost always). For the purpose of this study, the Likert Scale was altered to a six-point rating system. The main motive for this alteration was to facilitate comparison between this study and the research conducted by Stoeber and Eismann (2007), which also employed the six-point scale.[13]

3.5 Pilot study

The Research Committee of the Department of Music, University of Pretoria, recommended a few changes to the questionnaire during the admittance process of the proposal. Questions which may have been ambiguous or vague were altered (Table 1).

Table 1: Questionnaire item adjustments

Item	
Section B: Multidimensional Perfectionism Scale (Frost et al. 1990)	
3[a]	As a child, I was punished for doing things less than perfect.
3[b]	As a child, I was punished for doing things less than perfectly.
13[a]	If someone does a task at work/school better than I, then I feel like I failed the whole task.
13[b]	If someone does a task at work/school better than I, then I feel as though I failed at the whole task.
Section C: Work Preference Inventory (Amabile et al. 1994)	
9[a]	I enjoy relatively simple, straightforward tasks.
9[b]	I enjoy only relatively simple, straightforward tasks.
10[a]	I am keenly aware of the grade point average goals I have for myself.
10[b]	I am keenly aware of the academic goals I have for myself.
Section D: Performance Anxiety Inventory-Revised (Rae & McCambridge 2004)	
8[a]	During exams I am so tense that my stomach gets upset.
8[b]	During exams I am so tense that I feel physically ill.

[a] Original question
[b] Altered version

After final approval by the committee, the questionnaire was distributed for pilot testing. The pilot sample consisted of first, second and third year students from various degrees on the University of Pretoria's campus. The feedback from the pilot testing was satisfactory and none of the questions needed altering.[14]

[13] Refer to study on psychometric properties of Likert scales by Leung (2011).
[14] The purpose of the pilot testing in this study was to determine the appropriate use of terminology. It was not, in contrast to many cases of pilot testing in quantitative research, intended to determine the reliability of the research instruments.

3.6 Data collection

Data collection could not commence until written approval was obtained from the Research and Ethics Committees from each university. Once permission was received, suitable dates and times were arranged with each of the participating departments. I travelled to the various universities in order to administer the questionnaire in person. Students only participated after informed consent was completed under the supervision of the researcher.

The first set of questionnaires was distributed at the Music Department of the North-West University. Students were approached during their weekly assembly meeting. 32 of the students met the required sample criteria and all agreed to participate. They remained in the group setting while completing the questionnaire and they were finished after approximately 30 minutes. Before long, students from the University of the Free State were invited to participate and a total of 16 students completed the questionnaire. The data collection at Stellenbosch University took place over two days. The student were invited to complete the questionnaire under supervision at a time convenient for them. As a result, 21 students took part in the study. The last set of questionnaires was distributed at the University of Pretoria over a period of several weeks. A total of 24 students participated in the study.

As pointed out by Maree and Pietersen (2010: 157), the group administration method has several advantages, such as time and cost efficiency, optimal response rate and the immediate assistance should there be any uncertainties. However, the majority of the challenges experienced during the data collection were administrative – particularly obtaining the necessary consent from the various universities' research committees and arranging suitable times, dates and venues for the completion of the questionnaires.

3.7 Statistical analysis

After the 93 questionnaires were completed, the raw data was coded and captured using Microsoft Excel and sent to an independent statistician who analysed the data by means of the IBM Statistical Product and Service Solutions package (SPSS). The relatively small sample (N = 93) prevented the assumption that variables are normally distributed and as a result nonparametric techniques were used.

The statistical procedure will be considered in terms of the following:

- **descriptive statistics** presented the demographic content of the sample
- the **Cronbach Alpha scores** for each research instrument were calculated to indicate the reliability and validity of the measurement instrument

- **Spearman's rank correlations** were calculated in order to determine statistical significant relations between perfectionism, academic motivation and performance anxiety
- **Mann-Whitney U test** was employed to investigate significant differences between the two gender groups on perfectionism, academic motivation and performance anxiety
- **Kruskal-Wallis one-way analysis of variance** was used to determine differences between the four universities, as well as the academic year of study on all sections of the questionnaire

The results of the study, according to these components, are discussed in Chapter 4.

3.7.1 Descriptive statistics

The summary or explanation of data is known as descriptive statistics which is interpreted according to the number of participants, minimum and maximum scores, mean scores and standard deviations. The arithmetic mean refers to the average score of a group and is calculated by dividing the total of individual scores by the number of scores. Standard deviation is used to determine whether the scores of a parametric test "are evenly distributed and cluster closely around the mean" (Welman et al. 2005: 230). A detailed report on the descriptive statistics of this study is included in Chapter 4.

3.7.2 Validity and reliability

The original validity and reliability of each measurement instrument were taken into account before it was included in the questionnaire.[15] The reliability of a measurement instrument refers to its stability and consistency, its "ability to yield consistent numerical results each time it is applied" (Delport & Roestenburg 2012: 177). The Cronbach Alpha coefficient is the most widely used reliability measure and ranges between 0 and 1. The closer to the coefficient is to 1, the higher the reliability of the scale. The three standardized research instruments under consideration include the MPS (Frost et al. 1990), the WPI (Amabile et al. 1994) and the PAI (Rae & McCambridge 2004).[16]

[15] It refers to the scores obtained by the creators of the measurement instrument during the initial scale development.
[16] The internal consistency scores of all the measurement instruments will be taken into account in the context of the current study in Chapter 4.

Multidimensional Perfectionism Scale (Frost et al. 1990)

The MPS measured high in reliability with the coefficients of internal consistency ranging from .77 to .93 (Table 2). The total reliability score for the scale measured a high of .90. (Frost et al. 1990: 454-455).

Table 2: Reliability scores of the Multidimensional Perfectionism Scale

Dimension of Perfectionism	Cronbach's Alpha
Concern over Mistakes	.88
Personal Standards	.83
Parental Expectations	.84
Parental Criticism	.84
Doubts about Actions	.77
Organization	.93

Work Preference Inventory (Amabile et al. 1994)

The WPI was found to have "meaningful factor structures, adequate internal consistency, good short-term test-retest reliability, and good longer-term stability" (Amabile et al. 1994: 950). The internal consistencies ranged between .71 and .78 (Table 3).

Table 3: Reliability scores of the Work Preference Inventory

Dimension of Motivation		Cronbach's Alpha
Intrinsic Motivation	Enjoyment	.71
	Challenge	.74
Extrinsic Motivation	Outward	.71
	Compensation	.78

Performance Anxiety Inventory (Rae & McCambridge 2004)

The revised PAI appears to measure a single construct – performance anxiety. The inventory scored an internal consistency of .89, similar to the original version of the scale (Nagel et al. 1981) which scored .88 (Rae & McCambridge 2004: 433). The scores are included in Table 4:

Table 4: Reliability scores of the Performance Anxiety Inventory

	Cronbach's Alpha
Performance Anxiety Inventory	.88
Performance Anxiety Inventory-Revised	.89

3.7.3 Inferential statistics

The employment of data to generalise or draw conclusions about the population is known as statistical inference (Pietersen & Maree 2010: 198). Spearman's rank correlation coefficient, Mann-Whitney U tests and Kruskall-Wallis one-way analysis were employed to explore the relationships between the different variables.

Spearman's rank correlation coefficient

The Spearman's rank order correlation coefficient is the nonparametric version of the Pearson correlation coefficient and is based on the ranks of the data rather than the actual values. The values of the coefficient range from -1 to +1, with the sign indicating the direction of the relationship. The coefficient's absolute value indicates the strength – larger absolute values signifying stronger relationships. It is important to note that correlations are not an indication of causality, but merely an indication of the existence and nature of a relationship between variables. (Pietersen & Maree 2010: 237-238). In this study the Spearman's rank correlation coefficient was used to determine the correlation between perfectionism, academic motivation and music performance anxiety.

Mann-Whitney U test for independent samples

The Mann-Whitney U test is a nonparametric test that is used when two independent samples need to be compared based on a single variable. This test is a distribution-free alternative to the independent samples t-test. Instead of making use of the actual values, the Mann-Whitney statistics are based on ranks. The Mann-Whitney statistic is obtained by counting the number of times an observation from the group with the smaller sample size precedes an observation from the larger group. It is therefore especially sensitive to population differences in central tendency. Like the t-test, Mann-Whitney tests the null hypothesis that the medians of the two samples are the same. The rejection of the null hypothesis is generally an indication of a significant difference between the two groups on a specific variable measured (Pietersen & Maree 2010: 233-234). The Mann-Whitney U test was used to determine whether statistically significant differences existed between the music course and gender groups on all the subscales of the questionnaire

Kruskal-Wallis one-way analysis of variance

The Kruskal-Wallis test is a one-way analysis of variance and a direct generalization of the Wilcoxon rank-sum test. It is used when three or more independent samples are involved and to test the hypothesis that all samples are drawn from identical populations (Howell 1992: 622; Welman et al. 2005: 230). This test was used to determine significant differences between the various universities and years of study on all the subscales of the questionnaire.

3.8 Ethical considerations

Several ethical principles should be considered when conducting research. In order to ensure that this study followed the ethical guidelines, ethical approval was received from the University of Pretoria's Research and Ethics Committees, as well as the four participating universities' Ethics Committees. Strydom (2012: 115-117) identifies a number of important ethical aspects:

3.8.1 Avoidance of harm

The principle of nonmaleficence involves avoiding harm to any of the participants – therefore considering potential risks that may involve emotional or physical harm. Furthermore, the researcher should be sensitive towards creating stress for the participants that have no fundamental research purpose. Vulnerable participants should be identified and eliminated before the commencement of the study (Delport & Roestenburg 2012; Neuman 2003). Participants were assured that there were no risks involved in the study.

3.8.2 Voluntary participation

Although research participation should always be voluntary, it may deliver some complications. The mere fact that participants agree to take part, and are aware that they are being studied, may result in them altering their behaviour. The results may thus be less accurate (Strydom 2012: 116). The informed consent form emphasized that participation is voluntary and that withdrawal from the study is possible at any time.

3.8.3 Informed consent

Informed consent involves providing the participants with adequate information, aims, expected duration, procedures, possible advantages and dangers of the study, as well as the credibility of the researcher (Strydom 2012: 117; Royse 2004: 52-54; Williams et al. 1995: 30). A standard informed consent form is attached in Appendix 2. The wellbeing of the participants was the core prerequisite in allowing the study to be conducted.

3.8.4 Deception of subjects

In essence, deception refers to withholding or offering incorrect information in order to convince subjects to participate in situations where they would otherwise possibly have refused (Strydom 2012: 118-119; Struwig & Stead 2001: 69; Corey et al. 1993: 230). All possible measures were taken to ensure that the participants were informed about the nature and possible implications of the study.

3.8.5 Violation of confidentiality

At the onset of the study, the researcher pledged to handle all information in a confidential manner. The privacy of all participants was respected and access to personal information limited.

3.9 Summary

This chapter explains the research methodology of the study. An analytical survey design within the quantitative approach is followed. The questionnaire consists of four sections. Sections B-D of the questionnaire includes standardised inventories, namely the MPS (Frost et al. 1990), the WPI (Amabile et al. 1994) and the PAI-R (Rae & McCambridge 2004). Data collection commenced once the necessary permission from the participating universities were obtained. The completed questionnaires were submitted for data analysis. The chapter concludes with relevant ethical considerations.

CHAPTER 4

Results

4.1 Introduction

Statistical analysis was employed to determine how perfectionism correlates with academic motivation and performance anxiety in undergraduate music students. The study furthermore proposed to obtain a greater understanding on how perfectionism correlates with academic motivation and performance anxiety respectively, explore the relation between academic motivation and performance anxiety, recognise the positive and negative experiences of perfectionism, and lastly identify the intrinsic and extrinsic motivational drives in first, second and third year students. The following research instruments were used to investigate the various relationships: the MPS (Frost et al. 1990); the WPI (Amabile et al. 1994); and the PAI (Rae & McCambridge 2004). The results of the data will be discussed in this chapter.

4.2 Chapter layout

The content of the chapter is presented as follows:

- Description of the sample
- List of measurement instruments
- Cronbach Alpha scores of the different measurement instruments
- Correlations between the various dimensions of the MPS, WPI and PAI-R
- Confounding variables: Summary of scores on questionnaire items
- Confounding variables: Comparisons between item scores
- Summary of results
- Conclusion

4.3 Description of sample

A total of 93 music students from four South African universities participated in the study. The descriptive statistics of the sample group will be presented schematically followed by a brief discussion.

The sample group was distributed as follow among the four universities (Figure 5): 32 participants (34%) were enrolled at the North-West University; 24 music students (26%) attended the University of Pretoria; Stellenbosch University was represented by 21 participants (23%); and 16 participants (17%) were students from the University of the Free State.

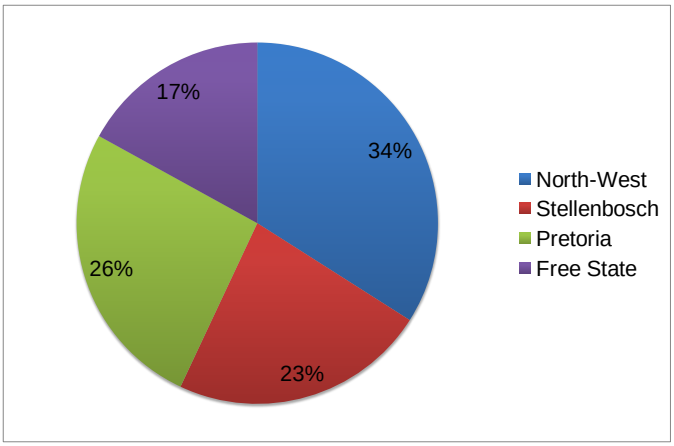

Figure 5: Distribution of participants among four South African universities

The research sample consisted of students enrolled for either the BMus or BA (Music) degree. Among the participants, 34 (37%) were BA (Music) students, and 59 (63%) were BMus students (Figure 6).

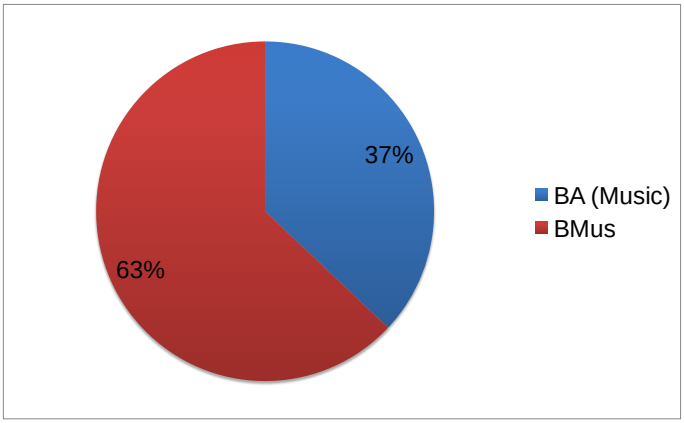

Figure 6: Music degree

The first three year groups from the respective music departments took part in the study and are represented according to their academic year (Figure 7): 36 first year students (39%); 25 second year students (27%); 32 third year students (34%).

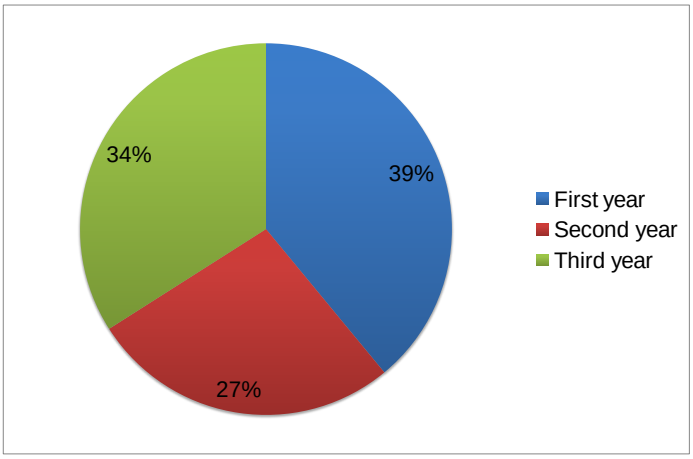

Figure 7: Academic year of study

The gender distribution of the sample was not equal. A total of 59 female students (63%) and 34 male students (37%) participated (Figure 8).

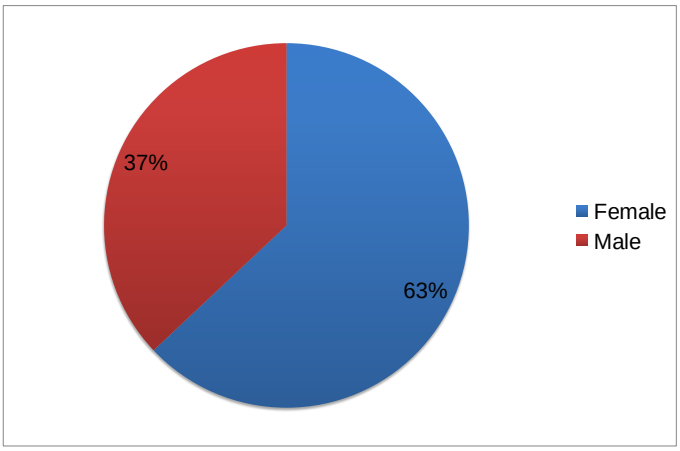

Figure 8: Gender distribution

The home language of the participants recorded in this sample reflects the country's diversity (11 official languages). The following home languages are represented: Afrikaans; English; IsiXhosa; Sepedi; Sesotho; Setswana; Shona; and Zulu, and to a lesser extent, European and Asian languages, such as German; Mandarin; and Korean. Of this sample, 46% are Afrikaans home language speakers (which is not surprising given that traditionally Stellenbosch University and the North-West University are mainly Afrikaans-medium institutions), 23% English, and the remaining 21% are grouped together as Other languages (Figure 9). It should be noted that the Other language group is mainly representative of African languages – 21 of the 29 participants speak an African language. The remaining 8 students indicated German, Mandarin or Korean as their home language.

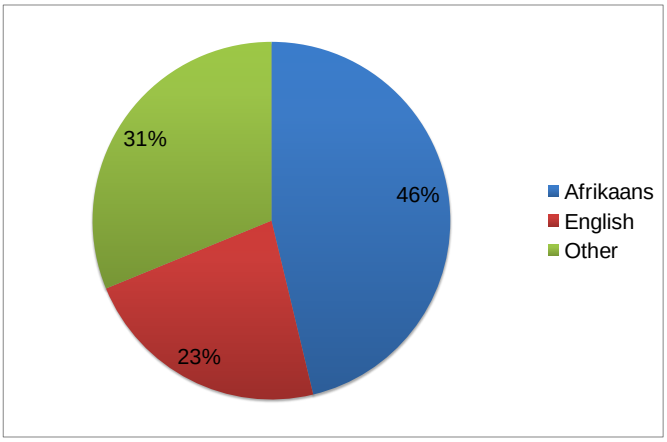

Figure 9: Home language

Figure 10 presents the distribution of the main instruments among the participants. 32 participants (34%) are keyboard players (piano and organ), 28 are vocalists (30%), 17 music students (18%) play string instruments (violin, viola or cello), 14 participants (15%) are wind players (woodwind and brass) and two participants (2%) are percussionists.

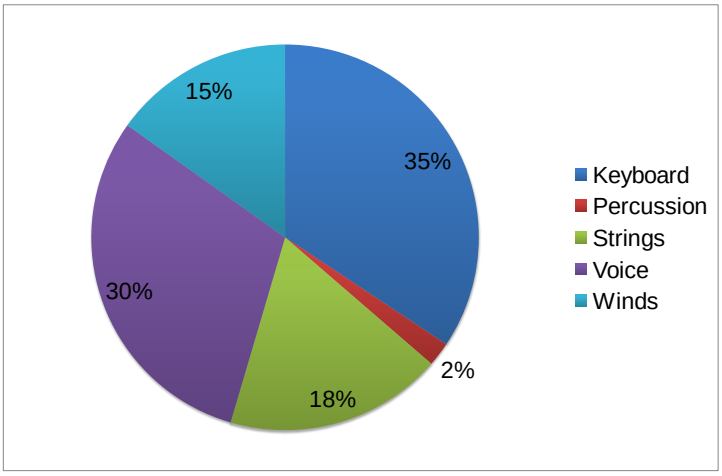

Figure 10: Main music instrument played

4.4 List of measurement instruments

The following measurement instruments were included in the questionnaire:

- The MPS (Frost et al. 1990). This instrument consists of the six subscales presenting the various dimensions of perfectionism: Doubts about Actions; Concern over Mistakes; Parental Criticism; Parental Expectations; Personal Standards; and Organization.
- The WPI (Amabile et al. 1994). There are four subscales in this inventory that assess different aspects of motivation, namely Intrinsic Motivation: Enjoyment, Intrinsic Motivation: Challenge, Extrinsic Motivation: Outward, and Extrinsic Motivation:

Compensation. The questions were adapted to have specific relevance to the participant's current context of tertiary music studies.

- The PAI-R (Rae & McCambridge 2004). The inventory focuses solely on anxiety, and in the context of this study, specifically on music performance-related anxiety.

4.5 Cronbach Alpha coefficients

The internal reliability of the various research instruments are indicated by the Cronbach Alpha scores. The closer the Cronbach Alpha coefficient scores to 1.0, the greater the internal reliability of the specific measurement item. A score of 0.8 and higher is considered as generally acceptable, with a score of below 0.6 being unacceptable in terms of reliability (Pietersen & Maree 2010: 216).

The measurement instruments used in this study proved adequate internal validity according to previous research.[17] In the context of this study, the instruments proved to be valid on most of the dimensions. Only one motivational dimension obtained an insufficient reliability score.

Multidimensional Perfectionism Scale

The initial scale development in 1990 (Frost et al. 1990) involved 410 female participants from North America. The current sample met the validity criterion by displaying similar reliability scores as the participants from the original study (Table 5).

Table 5: Reliability statistics of the Multidimensional Perfectionism Scale

Dimension of Perfectionism	Cronbach's Alpha		Number of items
	Original scale development	Current study	
Doubts about Actions	.77	**.670**	4
Concern over Mistakes	.80	**.870**	8
Parental Criticism	.84	**.732**	4
Parental Expectations	.84	**.812**	5
Personal Standards	.83	**.792**	8
Organization	.93	**.887**	6

[17] Refer to Chapter 3, section 3.7.2, p. 68-70 for the validity and reliability scores during the original scale development.

The similar scores between Frost et al. (1990) and the current study suggest the universality of perfectionistic tendencies across time, gender, nationality and other demographical variables.

Work Preference Inventory

In 1994, Amabile et al. tested the reliability and validity of the WPI on a sample of 1323 undergraduate students attending a university in the north eastern part of America. The reliability of the WPI according to the current sample is displayed in Table 6.

Table 6: Reliability statistics of the Work Preference Inventory

Dimension of Motivation		Cronbach's Alpha		Number of items
		Original scale development	Current study	
Intrinsic Motivation	Enjoyment	.71	**.416***	8
	Challenge	.74	**.788**	7
Extrinsic Motivation	Outward	.71	**.723**	10
	Compensation	.78	**.609**	5

Three of the four motivational dimensions proved to be acceptable in terms of reliability. However, the Intrinsic Motivation: Enjoyment subscale scored insufficiently. The small sample size of the current study could have influenced the reliability of the measurement instrument. Results involving the Enjoyment subscale should therefore be interpreted with caution.

Performance Anxiety Inventory-Revised

The PAI-R by Rae and McCambridge (2004) is an adaption of the original measure by Nagel (1981). The adapted version was validated on 120 high school musicians in Ireland. Comparisons between the reliability scores of Rae and McCambridge and the current study is shown in Table 7:

Table 7: Reliability statistics of the Performance Anxiety Inventory

	Cronbach's Alpha		Number of items
	PAI-R scale development	Current study	
Performance Anxiety	.88	**.916**	11

The PAI-R proved to be highly reliable in the South African context, with a Cronbach Alpha score of .916.

4.6 Correlations

In order to determine the relationships between the concepts of perfectionism, academic motivation and performance anxiety, Spearman's rank correlation coefficient was used. The choice of a nonparametric test is encouraged by the relatively small sample size of 93 participants. The data obtained from the following measurement instruments were taken into account:

- MPS
- WPI
- PAI-R

The strength of the correlations is classified according to the following guidelines (Cohen 1988), with all rating as statistically significant:

- weak correlations: r = 0.100 - 0.200
- moderate correlations: r = 0.300 - 0.400
- strong correlations: r ≥ 0.500

The following section will include a report on all relevant correlations between perfectionism, academic motivation, and performance anxiety scales. The absence of expected correlations will be briefly outlined without failing to emphasize the statistical significant correlations evident in the results. Firstly, an analysis of the correlations between the subscales of the MPS, WPI and PAI-R will be given. Thereafter the relations within perfectionism will be considered by examining possible correlations between any of the subscales of the MPS. Lastly, academic motivation will be further explored and correlations between the four subscales of the WPI will be taken into account.

4.6.1 Correlations between the subscales of the Multidimensional Perfectionism Scale, Work Preference Inventory and Performance Anxiety Inventory

A summary of the correlations found between the various subscales of the MPS, the WPI and the PAI-R, are displayed in Table 8.

Table 8: Subscales of the MPS, WPI, and PAI-R: Nonparametric correlations

			Intrinsic Motivation: Enjoyment	Intrinsic Motivation: Challenge	Extrinsic Motivation: Outward	Extrinsic Motivation: Compensation	Performance Anxiety
Spearman's rho	Concern over Mistakes	Correlation Coefficient	-.066	-.127	.567**	.145	.211*
		Sig. (2-tailed)	.527	.225	.000	.166	.043
		N	93	93	93	93	93
	Personal Standards	Correlation Coefficient	.128	.318**	.260*	.493**	.081
		Sig. (2-tailed)	.222	.002	.012	.000	.442
		N	93	93	93	93	93
	Parental Expectations	Correlation Coefficient	-.114	.053	.298**	.018	.165
		Sig. (2-tailed)	.278	.617	.004	.866	.113
		N	93	93	93	93	93
	Parental Criticism	Correlation Coefficient	-.045	-.069	.411**	-.021	.273**
		Sig. (2-tailed)	.665	.512	.000	.841	.008
		N	93	93	93	93	93
	Doubts about Actions	Correlation Coefficient	.096	-.184	.388**	-.187	.284**
		Sig. (2-tailed)	.359	.077	.000	.073	.006
		N	93	93	93	93	93
	Organization	Correlation Coefficient	.127	.336**	-.024	.283**	.095
		Sig. (2-tailed)	.225	.001	.817	.006	.367
		N	93	93	93	93	93
	Performance Anxiety	Correlation Coefficient	.011	-.107	.333**	.102	1.000
		Sig. (2-tailed)	.915	.308	.001	.328	
		N	93	93	93	93	93

**. Correlation is significant at the 0.01 level (2-tailed).
*. Correlation is significant at the 0.05 level (2-tailed).

The Concern over Mistakes subscale of the MPS displayed two significant correlations. There was a strong positive relation with the Extrinsic Motivation: Outward subscale of the WPI (r=0.567; p=0.000) and a weak positive correlation (r=0.211; p=0.043) with the scores on the Performance Anxiety Inventory. The Personal Standards subscale of the MPS showed moderate to strong correlations with the Intrinsic Motivation: Challenge and Extrinsic Motivation: Compensation subscales of the WPI. The correlation coefficients were (r=0.318; p=0.002) and (r=0.493; p=0.000) respectively. The Parental Expectations subscale of the MPS correlated positively with the Extrinsic Motivation: Outward subscale (r=0.298; p=0.004) of the WPI.

The MPS-subscale of Parental Criticism presented a moderate correlation with the Extrinsic Motivation: Outward subscale (r=0.411; p=0.000) of the WPI. The Parental Criticism subscale furthermore displayed a weak correlation with the items on the PAI (r=0.273; p=0.008). A moderate positive correlation was found between the Doubts about Actions subscale of the MPS and the Extrinsic Motivation: Outward subscale (r=0.388; p=0.000) of the WPI. The Doubts about Actions subscale also displayed a weak positive correlation with the items on the PAI (r=0.284; p=0.006). The Organization subscale of the MPS showed a moderate correlation with the Intrinsic Motivation: Challenge subscale (r=0.336; p=0.001) of the WPI. In addition, a weak positive correlation was found between the Organization subscale and Extrinsic Motivation: Compensation subscale (r=0.283; p=0.006) of the WPI. The items on the PAI-R displayed a moderate correlation with the Extrinsic Motivation: Compensation subscale (r=0.333; p=0.001) of the WPI.

4.6.2 Multidimensional Perfectionism Scale

A specific look into the positive and negative experiences of perfectionism yielded interesting results. The subscales of the MPS correlated with one another on several levels (Table 9). The subscales include Concern over Mistakes, Personal Standards, Parental Expectations, Parental Criticism, Doubts about Actions and Organization. Each subscale correlated with at least one other subscale, thereby strengthening the intricate nature of perfectionism.

The results will be discussed according to the sequence of subscales presented in Table 9 and not according to strength of significance.

Concern over Mistakes

The MPS's Concern over Mistakes subscale displayed a moderate correlation with the Personal Standards subscale (r=0.462; p=0.000), and a weak correlation with the Parental

Expectation subscale (r=0.241; p=0.20). Concern over Mistakes correlated moderately with both Parental Criticism (r=0.453; p=0.000) and Doubts about Actions (r=0.441; p=0.000).

Personal Standards

In addition to the moderate positive correlation with the Concern over Mistakes (r=0.462; p=0.000), the Personal Standards subscale presented a weak correlation with Doubts about Actions (r=0.223, p=0.31) and a moderate correlation with Organization (r=0.390; p=0.000).

Parental Expectations

The Parental Expectations furthermore displayed a strong positive correlation with the Parental Criticism subscale (r=0.584; p=0.000).

Parental Criticism

Together with the moderate correlation with the Concern over Mistakes subscale (r=0.241; p=0.20) and the strong correlation with the Parental Expectations subscale (r=0.584; p=0.000), the Parental Criticism subscale displayed a weak correlation to the Doubts about Actions subscale (r=0.289; p=0.005).

Doubts about Actions

Doubts about Actions displayed no other statistically significant associations other than the moderate correlation to Concern over Mistakes (r=0.441; p=0.000) and weak correlations to Personal Standards (r=0.223; p=0.31) and Parental Criticism (r= 0.289; p=0.005).

Organization

The Organization subscale correlated moderately to the Personal Standards subscale (r=0.390; p=0.000).

Table 9: Multidimensional Perfectionism Scale**:** Nonparametric correlations

			Concern over Mistakes	Personal Standards	Parental Expectations	Parental Criticism	Doubts about Actions	Organization
Spearman's rho	Concern over Mistakes	Correlation Coefficient	1.000	.462**	.241*	.453**	.441**	-.085
		Sig. (2-tailed)		.000	.020	.000	.000	.420
		N	93	93	93	93	93	93
	Personal Standards	Correlation Coefficient	.462**	1.000	.112	.176	.223*	.390**
		Sig. (2-tailed)	.000		.283	.092	.031	.000
		N	93	93	93	93	93	93
	Parental Expectations	Correlation Coefficient	.241*	.112	1.000	.584**	.157	.096
		Sig. (2-tailed)	.020	.283		.000	.132	.362
		N	93	93	93	93	93	93
	Parental Criticism	Correlation Coefficient	.453**	.176	.584**	1.000	.289**	-.047
		Sig. (2-tailed)	.000	.092	.000		.005	.657
		N	93	93	93	93	93	93
	Doubts about Actions	Correlation Coefficient	.441**	.223*	.157	.289**	1.000	-.058
		Sig. (2-tailed)	.000	.031	.132	.005		.581
		N	93	93	93	93	93	93
	Organization	Correlation Coefficient	-.085	.390**	.096	-.047	-.058	1.000
		Sig. (2-tailed)	.420	.000	.362	.657	.581	
		N	93	93	93	93	93	93

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

4.6.3 Work Preference Inventory

The four subscales of the WPI – Intrinsic Motivation: Enjoyment, Intrinsic Motivation: Challenge, Extrinsic Motivation: Outward and Extrinsic Motivation: Compensation – were compared with one another. As a result, three statistically significant correlations were found (Table 10). Firstly, a moderately positive correlation was discovered between Intrinsic Motivation: Enjoyment and Intrinsic Motivation: Challenge with correlation coefficients of r=0.302 and p=0.003. Additionally, the Intrinsic Motivation: Challenge subscale displayed a weak negative correlation with the Extrinsic Motivation: Outward subscale (r= -0.249; p=0.016) and a weak positive correlation with the Extrinsic Motivation: Compensation subscale (r= 0.226; p=0.029).

Table 10: Work Preference Inventory: Nonparametric correlations

			Intrinsic Motivation: Enjoyment	Intrinsic Motivation: Challenge	Extrinsic Motivation: Outward	Extrinsic Motivation: Compensation
Spearman's rho	Intrinsic Motivation: Enjoyment	Correlation Coefficient	1.000	.302**	-.173	-.184
		Sig. (2-tailed)		.003	.097	.077
		N	93	93	93	93
	Intrinsic Motivation: Challenge	Correlation Coefficient	.302**	1.000	-.249*	.226*
		Sig. (2-tailed)	.003		.016	.029
		N	93	93	93	93
	Extrinsic Motivation: Outward	Correlation Coefficient	-.173	-.249*	1.000	.115
		Sig. (2-tailed)	.097	.016		.274
		N	93	93	93	93
	Extrinsic Motivation: Compensation	Correlation Coefficient	-.184	.226*	.115	1.000
		Sig. (2-tailed)	.077	.029	.274	
		N	93	93	93	93

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

4.7 Summary of scores on questionnaire items

The responses of the MPS, WPI and PAI-R are summarised in Tables 11-16. The number of participants, as well as the minimum, maximum, mean and standard deviation scores of each subscale is included. These results are presented according to the following confounding variables: name of academic institution; music degree; academic year of study; gender; home language; and main music instrument.

4.7.1 Name of academic institution

Table 11 includes the descriptive statistics of the responses of the participants according to the name of their academic institution. All the subscales of the questionnaire are taken into account.

Table 11: Descriptive statistics for the academic institution

Which University do you attend?		N	Minimum	Maximum	Mean	Std. Deviation
North-West University	Concern over Mistakes	32	9.00	33.00	20.531	6.633
	Personal Standards	32	16.00	34.00	26.438	5.149
	Parental Expectations	32	9.00	25.00	16.719	4.342
	Parental Criticism	32	6.00	21.00	11.938	3.776
	Doubts about Actions	32	6.00	19.00	11.531	3.292
	Organization	32	8.00	30.00	23.531	5.565
	Intrinsic Motivation: Enjoyment	32	22.00	32.00	27.813	2.334
	Intrinsic Motivation: Challenge	32	16.00	30.00	23.594	3.349
	Extrinsic Motivation: Outward	32	16.00	33.00	25.719	4.430
	Extrinsic Motivation: Compensation	32	9.00	22.00	16.813	2.833
	Performance Anxiety Inventory	32	17.00	61.00	42.000	12.358
	Valid N (listwise)	32				
Stellenbosch University	Concern over Mistakes	21	12.00	31.00	21.048	5.886
	Personal Standards	21	17.00	34.00	26.000	5.330
	Parental Expectations	21	5.00	25.00	12.857	4.882
	Parental Criticism	21	6.00	16.00	9.191	2.562
	Doubts about Actions	21	5.00	17.00	11.095	3.300
	Organization	21	9.00	30.00	20.143	6.605
	Intrinsic Motivation: Enjoyment	21	23.00	30.00	26.905	2.606
	Intrinsic Motivation: Challenge	21	11.00	29.00	22.857	4.362
	Extrinsic Motivation: Outward	21	13.00	34.00	25.905	5.281

	Extrinsic Motivation: Compensation	21	10.00	22.00	17.286	3.349
	Performance Anxiety Inventory	21	20.00	61.00	39.524	14.672
	Valid N (listwise)	21				
Which University do you attend?		N	Minimum	Maximum	Mean	Std. Deviation
University of Pretoria	Concern over Mistakes	24	11.00	38.00	22.167	8.229
	Personal Standards	24	19.00	35.00	25.958	4.379
	Parental Expectations	24	5.00	22.00	14.250	4.014
	Parental Criticism	24	5.00	21.00	10.875	4.357
	Doubts about Actions	24	4.00	20.00	12.125	3.871
	Organization	24	14.00	30.00	22.542	3.671
	Intrinsic Motivation: Enjoyment	24	20.00	32.00	27.208	3.021
	Intrinsic Motivation: Challenge	24	12.00	27.00	21.625	3.774
	Extrinsic Motivation: Outward	24	19.00	34.00	25.417	4.727
	Extrinsic Motivation: Compensation	24	14.00	22.00	17.458	2.187
	Performance Anxiety Inventory	24	27.00	65.00	45.583	11.045
	Valid N (listwise)	24				
University of the Free State	Concern over Mistakes	16	10.00	31.00	18.625	7.736
	Personal Standards	16	19.00	35.00	26.500	5.151
	Parental Expectations	16	9.00	25.00	13.250	4.583
	Parental Criticism	16	5.00	14.00	9.125	3.364
	Doubts about Actions	16	6.00	18.00	11.813	3.728
	Organization	16	16.00	29.00	23.000	3.759
	Intrinsic Motivation: Enjoyment	16	24.00	31.00	28.188	1.974
	Intrinsic Motivation: Challenge	16	16.00	29.00	24.813	4.054
	Extrinsic Motivation: Outward	16	15.00	31.00	23.375	4.530
	Extrinsic Motivation: Compensation	16	13.00	20.00	16.375	2.363
	Performance Anxiety Inventory	16	15.00	56.00	38.000	13.084
	Valid N (listwise)	16				

The various dimensions of perfectionism, as measured by the MPS, therefore delivered the following mean scores according to the students from the various universities:

- The students from the University of Pretoria scored the highest on the Concern over Mistakes subscale with a mean score of 22.167, in contrast to the University of the Free State whose participants scored only 18.625.
- The Personal Standard subscale displayed relatively similar results between the four participating universities with a mean score ranging from 25.959 (University of Pretoria) to 26.438 (North-West University).
- The sample from the North-West University scored the highest on the Parental Expectations subscale with 16.719, compared to the lowest result of 12.857 by the Stellenbosch University students.
- Similarly, the North-West University students scored the highest on the Parental Criticism subscale with 11.938, and the participants from University of the Free State scored the lowest with 9.125.
- The Doubts about Actions subscale displayed relatively consistent scores across the university groups and varied between 11.095 (Stellenbosch University) and 12.125 (University of Pretoria).
- The Organization subscale of perfectionism scored the highest with participants from the North-West University (23.531), and the lowest with the Stellenbosch University participants (20.143).

Academic motivation, as measured by the WPI, displayed the following distribution:

- The sample from the University of the Free State scored the highest on the Intrinsic Motivation: Enjoyment subscale with a mean score of 28.188, whereas the Stellenbosch University students rated the lowest at 26.905.
- Intrinsic Motivation: Challenge also scored the highest amongst the University of the Free State's participants with 24.813, in contrast to the sample from the University of Pretoria with 21.625.
- Students from Stellenbosch University displayed the highest degree of Extrinsic Motivation: Outward at 25.905, compared to the students from the University of the Free State at 23.375.
- The Extrinsic Motivation: Compensation scores were fairly evenly distributed between the university groups, ranging from 16.375 (University of the Free State) to 17.458 (University of Pretoria).

The PAI-R revealed the highest levels of performance anxiety for the students from the University of Pretoria (45.583), and the lowest levels for the students from the University of the Free State (38.00).

4.7.2 Music degree

Table 12 presents the descriptive data on all subscales of the measurement instruments according to the music degree.

Table 12: Descriptive statistics for BA (Music) and BMus degrees

Which course do you follow at the University?		N	Minimum	Maximum	Mean	Std. Deviation
BA (Music)	Concern over Mistakes	34	10.00	34.00	21.000	6.015
	Personal Standards	34	17.00	34.00	26.206	4.333
	Parental Expectations	34	9.00	24.00	16.265	3.980
	Parental Criticism	34	6.00	19.00	11.824	3.537
	Doubts about Actions	34	6.00	20.00	12.147	3.457
	Organization	34	15.00	30.00	23.118	4.347
	Intrinsic Motivation: Enjoyment	34	23.00	32.00	27.647	2.087
	Intrinsic Motivation: Challenge	34	15.00	29.00	22.618	3.534
	Extrinsic Motivation: Outward	34	19.00	34.00	26.059	3.773
	Extrinsic Motivation: Compensation	34	14.00	22.00	17.265	2.300
	Performance Anxiety Inventory	34	25.00	61.00	45.765	11.152
	Valid N (listwise)	34				
BMus	Concern over Mistakes	59	9.00	38.00	20.593	7.699
	Personal Standards	59	16.00	35.00	26.237	5.276
	Parental Expectations	59	5.00	25.00	13.661	4.766
	Parental Criticism	59	5.00	21.00	9.831	3.752
	Doubts about Actions	59	4.00	18.00	11.339	3.502
	Organization	59	8.00	30.00	22.017	5.661
	Intrinsic Motivation: Enjoyment	59	20.00	32.00	27.441	2.781
	Intrinsic Motivation: Challenge	59	11.00	30.00	23.424	4.120
	Extrinsic Motivation: Outward	59	13.00	34.00	24.831	5.183
	Extrinsic Motivation: Compensation	59	9.00	22.00	16.864	2.945
	Performance Anxiety Inventory	59	15.00	65.00	39.322	13.194
	Valid N (listwise)	59				

When comparing the two groups of students according to the type of music degree, several interesting differences were found on the subscales of perfectionism.

- The BA (Music) students displayed higher levels on Parental Expectations with 16.265, with the BMus students scoring 13.661.
- Similarly, the BA (Music) participants perceived a greater degree of Parental Criticism 11.824 than their BMus counterparts 9.831.
- The BA (Music) students furthermore displayed higher scores for both Doubts about Actions and Organization with 12.147 and 23.118 respectively, compared to the BMus students with 11.334 and 22.017.
- Both groups displayed similar scores on the Concern over Mistakes (BA Music: 21.000; BMus: 20.593) and Personal Standards (BA Music: 26.206; BMus: 26.237) subscales.

The BA (Music) and BMus students showed the following trends on the motivational subscales:

- The participants from both types of degree scored similarly on the Intrinsic Motivation: Enjoyment subscale. The BA (Music) students scored 27.647, whereas the BMus students scored 27.441.
- In terms of Intrinsic Motivation: Challenge, the BMus students showed higher levels with 23.424, compared to the BA (Music) participants with 22.618.
- The BA (Music) group however, appeared to be more extrinsically motivated by attaining higher scores in both the Extrinsic Motivation: Outward (26.059) and Extrinsic Motivation: Compensation (17.265) subscales compared to the BMus group with 24.831 and 16.841 respectively.

The PAI-R revealed the following difference:

- Overall, the BA (Music) students displayed significantly higher levels of performance anxiety at 45.765, compared to the BMus students at 39.322.

4.7.3 Academic year of study

Table 13 presents the descriptive statistics for the first, second and third year of academic music studies according the subscales of the questionnaires.

Table 13: Descriptive statistics for academic year of studies

Which year of music studies are you currently enrolled for?		N	Minimum	Maximum	Mean	Std. Deviation
First Year	Concern over Mistakes	36	9.00	35.00	21.028	7.077
	Personal Standards	36	17.00	34.00	25.972	4.583
	Parental Expectations	36	5.00	25.00	13.694	4.804
	Parental Criticism	36	5.00	17.00	9.611	3.036
	Doubts about Actions	36	6.00	20.00	12.194	3.302
	Organization	36	9.00	30.00	21.917	4.913
	Intrinsic Motivation: Enjoyment	36	22.00	32.00	27.806	2.550
	Intrinsic Motivation: Challenge	36	11.00	29.00	22.500	3.653
	Extrinsic Motivation: Outward	36	15.00	33.00	24.972	4.675
	Extrinsic Motivation: Compensation	36	9.00	22.00	16.333	2.869
	Performance Anxiety Inventory	36	15.00	61.00	42.166	12.643
	Valid N (listwise)	36				
Second Year	Concern over Mistakes	25	9.00	36.00	20.000	7.071
	Personal Standards	25	16.00	35.00	26.160	5.129
	Parental Expectations	25	9.00	25.00	15.320	4.697
	Parental Criticism	25	5.00	21.00	11.200	3.764
	Doubts about Actions	25	5.00	17.00	11.320	3.591
	Organization	25	8.00	30.00	21.960	6.134
	Intrinsic Motivation: Enjoyment	25	22.00	32.00	27.920	2.499
	Intrinsic Motivation: Challenge	25	15.00	29.00	23.600	4.031
	Extrinsic Motivation: Outward	25	13.00	34.00	24.600	5.236
	Extrinsic Motivation: Compensation	25	10.00	22.00	16.920	2.783
	Performance Anxiety Inventory	25	17.00	61.00	40.680	14.277
	Valid N (listwise)	25				
Third Year	Concern over Mistakes	32	10.00	38.00	21.000	7.327
	Personal Standards	32	17.00	35.00	26.563	5.273
	Parental Expectations	32	6.00	25.00	15.094	4.395
	Parental Criticism	32	5.00	21.00	11.125	4.398
	Doubts about Actions	32	4.00	19.00	11.250	3.637

Organization	32	14.00	30.00	23.344	4.817
Intrinsic Motivation: Enjoyment	32	20.00	31.00	26.875	2.511
Intrinsic Motivation: Challenge	32	12.00	30.00	23.469	4.135
Extrinsic Motivation: Outward	32	18.00	34.00	26.156	4.393
Extrinsic Motivation: Compensation	32	14.00	22.00	17.844	2.330
Performance Anxiety Inventory	32	21.00	65.00	41.906	12.148
Valid N (listwise)	32				

The following perfectionistic patterns resulted between the different years of study:

- The Concern over Mistakes and Personal Standards subscales differed only slightly between the year groups, with the first years scoring 21.028 and 25.972 on the respective subscales, the second years 20.00 and 26.160, and the third years 21.00 and 26.563.
- The first year students seem to experience lower levels of both Parental Expectations 13.694 and Parental Criticism 9.611 compared to the second (15.320; 11.200) and third years (15.094; 11.125).
- Mean scores on the Doubts about Actions subscale were fairly similar between the year groups, with the first years displaying the highest levels at 12.194, followed by the second years at 11.320 and the third years at 11.250.
- Organization tendencies were the highest amongst the third years (23.344), followed by the second year (21.960) and first year students (21.917).

Academic motivation displayed the following patterns between the year groups in terms of intrinsic motivation:

- The Intrinsic Motivation: Enjoyment subscale varied between 27.806, 27.920 and 26.875 – with the second years indicating the highest level of enjoyment in contrast to the lowest score in the third years.
- Intrinsic Motivation: Challenge subscale scored at 22.500, 23.600 and 23.469 respectively – the second years once again displaying the highest scores, whereas the first years proved to be the least driven by challenging endeavours.
- Extrinsic Motivation displayed a different trend however, with both the Outward and Compensation subscales scoring the lowest for the second years (24.600; 16.920) and the highest for the third years (26.156; 17.844).

According to the PAI-R, it appears that anxiety levels are highest amongst the first years 42.167, with a slight decrease during the second year of study 40.680, and a small increase amongst the third years (41.906).

4.7.4 Gender of participants

Table 14 displays the descriptive statistics according to gender.

Table 14: Descriptive statistics for gender

Please indicate your gender.		N	Minimum	Maximum	Mean	Std. Deviation
Female	Concern over Mistakes	59	9.00	38.00	20.949	7.696
	Personal Standards	59	17.00	35.00	26.034	4.860
	Parental Expectations	59	5.00	25.00	14.509	4.677
	Parental Criticism	59	5.00	21.00	10.627	4.242
	Doubts about Actions	59	5.00	20.00	11.695	3.607
	Organization	59	9.00	30.00	22.509	4.717
	Intrinsic Motivation: Enjoyment	59	20.00	32.00	27.271	2.709
	Intrinsic Motivation: Challenge	59	11.00	30.00	22.932	4.097
	Extrinsic Motivation: Outward	59	13.00	34.00	24.797	4.737
	Extrinsic Motivation: Compensation	59	10.00	22.00	17.254	2.758
	Performance Anxiety Inventory	59	15.00	65.00	42.763	12.987
	Valid N (listwise)	59				
Male	Concern over Mistakes	34	11.00	31.00	20.382	6.015
	Personal Standards	34	16.00	35.00	26.559	5.100
	Parental Expectations	34	5.00	25.00	14.794	4.657
	Parental Criticism	34	5.00	16.00	10.441	2.862
	Doubts about Actions	34	4.00	18.00	11.529	3.323
	Organization	34	8.00	30.00	22.265	6.072
	Intrinsic Motivation: Enjoyment	34	22.00	32.00	27.941	2.187
	Intrinsic Motivation: Challenge	34	16.00	29.00	23.471	3.612
	Extrinsic Motivation: Outward	34	18.00	34.00	26.118	4.676
	Extrinsic Motivation: Compensation	34	9.00	22.00	16.588	2.641
	Performance Anxiety Inventory	34	20.00	61.00	39.794	12.460
	Valid N (listwise)	34				

In terms of gender the following trends are evident:

- The gender groups displayed similar perfectionistic tendencies on all the subscales of the MPS.
- Likewise, the WPI suggests comparable motivational drives between the genders, with the exception of the Extrinsic Motivation: Outward subscale. Here, male participants scored 26.118, somewhat higher than their female counterparts who scored 24.797.
- Lastly, it appears that female students experience higher levels of performance anxiety at 42.762, compared to the male participants at 39.794.

4.7.5 Home language

Table 15 includes the scores on the subscales according to first language. In order to investigate predominantly South African culture groups it was decided to group the African language participants (IsiXhosa, Sepedi, Sesotho, Setswana, Shona and Zulu) together, and create an additional category for the Other language participants (German, Mandarin and Korean), which is labelled Other. The variables presented here are Other, Afrikaans, English and African languages.

Table 15: Descriptive statistics for first language

Please indicate your home language.		N	Minimum	Maximum	Mean	Std. Deviation
Other	Concern over Mistakes	8	9.00	38.00	22.750	11.196
	Personal Standards	8	17.00	35.00	24.125	6.771
	Parental Expectations	8	9.00	25.00	16.875	5.718
	Parental Criticism	8	5.00	21.00	12.750	5.874
	Doubts about Actions	8	7.00	18.00	12.375	4.750
	Organization	8	14.00	27.00	19.875	4.581
	Intrinsic Motivation: Enjoyment	8	20.00	30.00	26.375	3.160
	Intrinsic Motivation: Challenge	8	12.00	27.00	21.875	5.384
	Extrinsic Motivation: Outward	8	20.00	34.00	26.750	5.339
	Extrinsic Motivation: Compensation	8	14.00	22.00	17.000	2.268
	Performance Anxiety Inventory	8	30.00	65.00	46.750	12.464
	Valid N (listwise)	8				
Afrikaans	Concern over Mistakes	43	9.00	35.00	21.395	7.528
	Personal Standards	43	16.00	35.00	26.349	4.825
	Parental Expectations	43	5.00	25.00	13.372	4.226
	Parental Criticism	43	5.00	21.00	10.140	3.496

	Doubts about Actions	43	4.00	20.00	11.140	3.509
	Organization	43	8.00	30.00	22.651	5.305
	Intrinsic Motivation: Enjoyment	43	22.00	32.00	27.581	2.528
	Intrinsic Motivation: Challenge	43	15.00	30.00	23.209	3.870
	Extrinsic Motivation: Outward	43	13.00	34.00	24.791	5.258
	Extrinsic Motivation: Compensation	43	9.00	22.00	16.791	3.113
	Performance Anxiety Inventory	43	15.00	61.00	40.930	14.292
	Valid N (listwise)	43				
English	Concern over Mistakes	21	11.00	29.00	18.952	4.653
	Personal Standards	21	17.00	34.00	25.952	5.143
	Parental Expectations	21	7.00	25.00	13.238	4.505
	Parental Criticism	21	5.00	15.00	9.286	2.610
	Doubts about Actions	21	9.00	17.00	12.143	2.834
	Organization	21	9.00	30.00	21.762	6.164
	Intrinsic Motivation: Enjoyment	21	23.00	31.00	27.286	2.391
	Intrinsic Motivation: Challenge	21	11.00	29.00	22.714	4.372
	Extrinsic Motivation: Outward	21	18.00	30.00	24.048	3.892
	Extrinsic Motivation: Compensation	21	14.00	22.00	17.143	2.613
	Performance Anxiety Inventory	21	21.00	60.00	39.905	12.058
	Valid N (listwise)	21				
African languages	Concern over Mistakes	21	10.00	33.00	20.429	6.423
	Personal Standards	21	17.00	34.00	27.048	4.213
	Parental Expectations	21	9.00	24.00	17.667	3.597
	Parental Criticism	21	5.00	19.00	11.857	3.928
	Doubts about Actions	21	6.00	19.00	11.857	3.623
	Organization	21	15.00	29.00	23.571	4.057
	Intrinsic Motivation: Enjoyment	21	22.00	32.00	28.048	2.479
	Intrinsic Motivation: Challenge	21	18.00	29.00	23.857	2.903
	Extrinsic Motivation: Outward	21	22.00	34.00	26.952	3.735

	Extrinsic Motivation: Compensation	21	14.00	22.00	17.333	2.199
	Performance Anxiety Inventory	21	25.00	61.00	43.048	10.457
	Valid N (listwise)	21				

The participants from the various languages groups displayed numerous differences on the various scales:

- For the MPS, the English speaking students scored lower than the rest of the students on the Concern over Mistakes subscale (18.952) – compared to Other: 22.750; Afrikaans: 21.395; and African languages: 20.429.
- The Personal Standards subscale displayed lower levels for the Other language students (24.125) compared to the rest of the students (Afrikaans: 26.349; English: 25.952; and African languages: 27.048).
- Perfectionistic tendencies on the Parental Expectations subscale are divided – with the Afrikaans and English groups scoring lower (13.372 and 13.238 respectively), compared to the African and Other languages (17.667 and 16.875).
- English speaking students displayed the lowest levels of perceived Parental Criticism (9.286), with the Other language group displaying the highest levels (12.750).
- Doubts about Actions scores were uniform across the language groups, ranging from 11.140 (Afrikaans) to 12.375 (Other).
- The Organization subscale presented a lower score for the Other language group (19.875) in comparison to the rest of the participants (Afrikaans: 22.651; English: 21.762; African languages: 23.5).
- Both Extrinsic and Intrinsic Motivation scored similarly across the language groups. Intrinsic Motivation: Enjoyment ranged from 26.375 (Other) to 28.048 (African language), and Intrinsic Motivation: Challenge differed between 21.875 (Other) and 23.857 (African languages). Extrinsic Motivation: Outward varied from 24.048 (English) to 26.952 (African languages), while Extrinsic Motivation: Compensation scored between 16.791 (Afrikaans) and 17.333 (African languages).
- The English participants revealed the lowest levels of music performance anxiety with 39.905, in contrast to the Other language group who scored the highest with 46.705.

4.7.6 Main music instrument

Included in Table 16 are the descriptive results according to the main instruments[18].

Table 16: Descriptive statistics for main instrument

Please indicate your first music instrument.		N	Minimum	Maximum	Mean	Std. Deviation
Keyboard	Concern over Mistakes	32	9.00	38.00	21.063	8.175
	Personal Standards	32	17.00	34.00	27.219	4.804
	Parental Expectations	32	6.00	25.00	13.781	4.294
	Parental Criticism	32	5.00	20.00	10.094	3.728
	Doubts about Actions	32	4.00	20.00	11.500	3.698
	Organization	32	14.00	30.00	23.813	4.856
	Intrinsic Motivation: Enjoyment	32	20.00	31.00	26.938	2.663
	Intrinsic Motivation: Challenge	32	12.00	30.00	23.563	3.967
	Extrinsic Motivation: Outward	32	15.00	34.00	25.438	5.054
	Extrinsic Motivation: Compensation	32	13.00	22.00	18.313	2.389
	Performance Anxiety Inventory	32	21.00	65.00	44.844	12.979
	Valid N (listwise)	32				
Strings	Concern over Mistakes	17	10.00	36.00	23.353	7.615
	Personal Standards	17	17.00	35.00	26.706	5.785
	Parental Expectations	17	5.00	25.00	14.294	5.676
	Parental Criticism	17	5.00	21.00	10.882	3.790
	Doubts about Actions	17	6.00	18.00	11.353	3.552
	Organization	17	9.00	30.00	22.294	4.997
	Intrinsic Motivation: Enjoyment	17	23.00	32.00	28.177	2.456
	Intrinsic Motivation: Challenge	17	18.00	29.00	23.059	3.544
	Extrinsic Motivation: Outward	17	18.00	33.00	25.706	4.356
	Extrinsic Motivation: Compensation	17	9.00	22.00	16.412	3.337
	Performance Anxiety Inventory	17	20.00	61.00	44.412	11.170
	Valid N (listwise)	17				
Voice	Concern over Mistakes	28	9.00	33.00	20.714	6.036
	Personal Standards	28	20.00	34.00	26.357	4.021
	Parental Expectations	28	5.00	25.00	16.750	4.402

[18] Percussion is not included here, as the small sample size (2 participants) will not enable statistically valid comparison to the rest of the instrument groups.

	Parental Criticism	28	5.00	21.00	11.607	4.254
	Doubts about Actions	28	5.00	19.00	12.321	3.198
	Organization	28	15.00	29.00	22.571	4.238
	Intrinsic Motivation: Enjoyment	28	22.00	32.00	28.179	2.435
	Intrinsic Motivation: Challenge	28	18.00	29.00	23.500	3.328
	Extrinsic Motivation: Outward	28	13.00	34.00	25.643	5.064
	Extrinsic Motivation: Compensation	28	10.00	22.00	16.357	2.438
	Performance Anxiety Inventory	28	17.00	61.00	39.750	11.862
	Valid N (listwise)	28				
Winds	Concern over Mistakes	14	11.00	24.00	16.643	3.992
	Personal Standards	14	16.00	31.00	23.571	5.258
	Parental Expectations	14	7.00	18.00	12.571	3.480
	Parental Criticism	14	5.00	13.00	9.286	2.730
	Doubts about Actions	14	6.00	17.00	10.500	3.546
	Organization	14	8.00	30.00	19.714	7.237
	Intrinsic Motivation: Enjoyment	14	22.00	30.00	26.929	2.303
	Intrinsic Motivation: Challenge	14	11.00	29.00	21.714	4.953
	Extrinsic Motivation: Outward	14	17.00	30.00	23.643	4.144
	Extrinsic Motivation: Compensation	14	13.00	22.00	16.500	2.345
	Performance Anxiety Inventory	14	15.00	59.00	34.357	14.173
	Valid N (listwise)	14				

The mean scores of the different instrument groups revealed the following:

- The perfectionistic tendencies of the instrument groups varied on the majority of the multidimensional subscales.
- The Winds attained the lowest mean score of 16.643 on the Concern over Mistakes subscale, in contrast to the Strings with a score of 23.353.
- The Personal Standards subscale reached the lowest score in the Winds at 23.571, with the rest of the instrument groups displaying similar scores – Keyboard: 27.219; Strings: 26.706 and Voice: 26.357.

- Similarly, the Winds indicated the lowest levels on both the Parental Expectations (12.571) and Parental Criticism (9.286) subscales, compared to the Voice, who scored the highest with 16.750 and 11.607 respectively.
- Doubts about Actions displayed parallel tendencies, with the Winds again obtaining the lowest mean score of 10.5, and the Voice the highest of 12.321.
- The last perfectionistic dimension, Organization, revealed wind players to be once again the least affected with a score of 19.714, in contrast to the highest levels in the Keyboard with 23.813.

4.8 Confounding variables

After exploring the correlations between perfectionism, academic motivation and performance anxiety, questions regarding the diversity within the participant groups arose and hence a decision was made to further investigate the sample. The variables such as the academic institution, music degree, year of study, gender, first language and main instrument, fuelled further questions regarding the consistency within the data set.

One should note that the results obtained from comparing the variables are not imperative to the aim of the study, neither can it necessarily lead to statistical valid assumptions as the subsample groups are limited in size. However, the quality and transparency of the sample, which can be explored by investigating the variables within the sample, are indicative of the general reliability and validity of the research results.

The variables within the sample were compared on all subscales of the questionnaire, and proved overall to be relatively consistent. Only a few statistical significant differences between the variables were evident. The scores of all 93 participants were taken into account and the results are presented in the following section.

4.8.1 Academic institution

In order to determine the existence of any significant differences between the participants from the various universities on the subscales of perfectionism, academic motivation and performance anxiety, the Kruskall-Wallis test was employed (Table 17). As a result, the MPS revealed significant differences on two of the perfectionistic dimensions, namely the Parental Expectations and Parental Criticism subscales.

Table 17: Hypothesis test summary: The distribution is similar across universities

	Null hypothesis: The distribution of the following subscale is similar across categories of 'Which university do you attend?'	**Significance**	**Retain the null hypothesis**
1	Concern over Mistakes	.393	✓
2	Personal Standards	.948	✓
3	Parental Expectations	.008	X
4	Parental Criticism	.028	X
5	Doubts about Actions	.822	✓
6	Organization	.175	✓
7	Intrinsic Motivation: Enjoyment	.564	✓
8	Intrinsic Motivation: Challenge	.075	✓
9	Extrinsic Motivation: Outward	.306	✓
10	Extrinsic Motivation: Compensation	.589	✓
11	Performance Anxiety	.266	✓

Asymptotic significances are displayed. The significance level is .05

The scores of the various university groups on the Multidimensional subscales are evident in Figure 11. The North-West University (16.71) displayed significantly higher scores than Stellenbosch University (12.85) on the Parental Expectations subscale; whereas the Parental Criticism subscale of the North-West University (11.93) was considerably higher than both Stellenbosch University (9.19) and the University of the Free State (9.12). These differences were significant at the 1% and 5% levels.

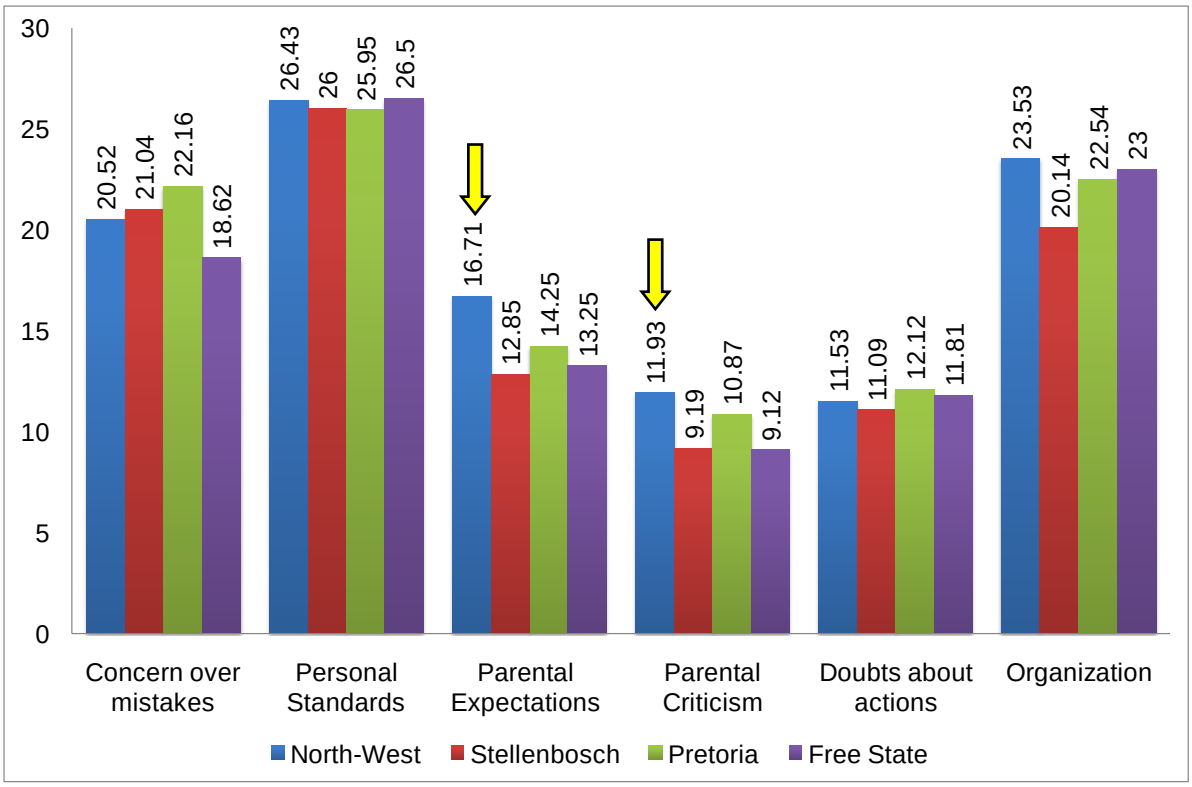

Figure 11: Multidimensional Perfectionism Scale**:** Comparisons between universities

As seen in in Figure 12, the subscales of the WPI delivered relatively equal distribution between the participants groups from the various universities. The greatest difference is evident between the participants from the University of Pretoria (21.63) and the University of the Free State (24.81) on the Intrinsic Motivation: Challenge subscale. This difference, however, carried no statistical significance.

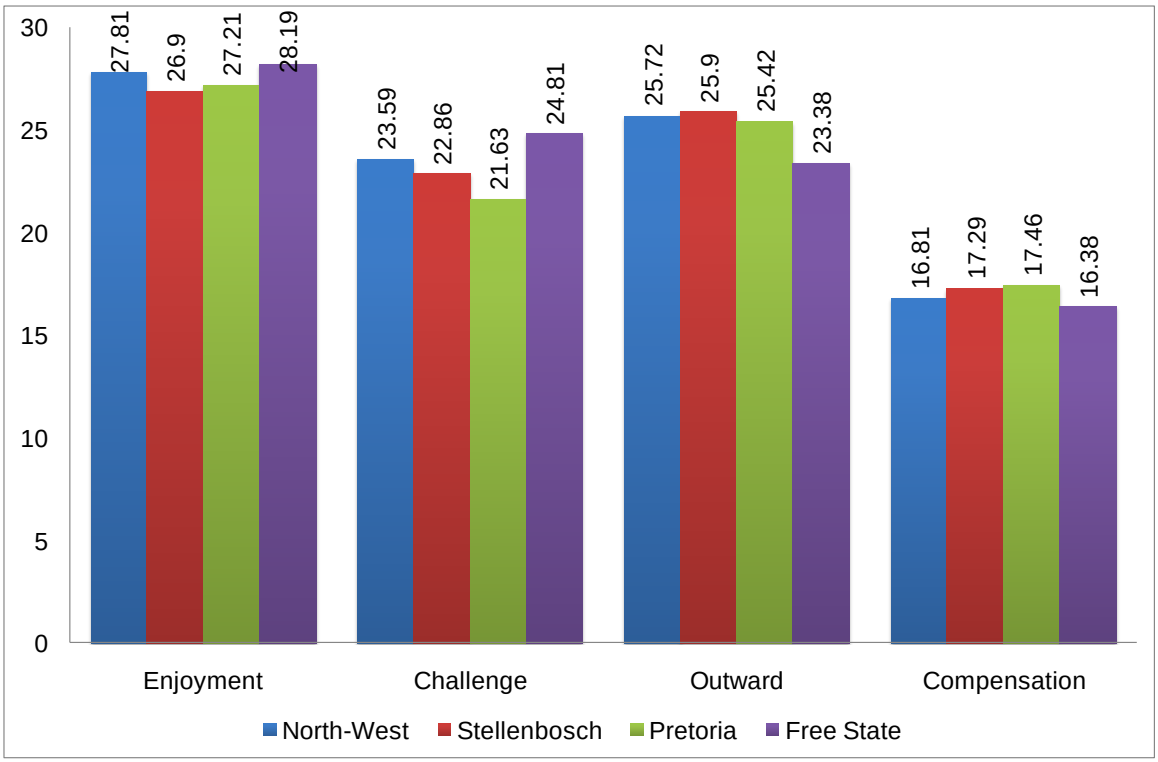

Figure 12: Work Preference Inventory: Comparisons between the universities

The PAI-R presented slighter higher scores for the students from the University of Pretoria (45.58), especially in comparison to the participants from Stellenbosch University (39.52) and the University of Free State (38). Nonetheless, these differences in scores were of no statistical significance (Figure 13).

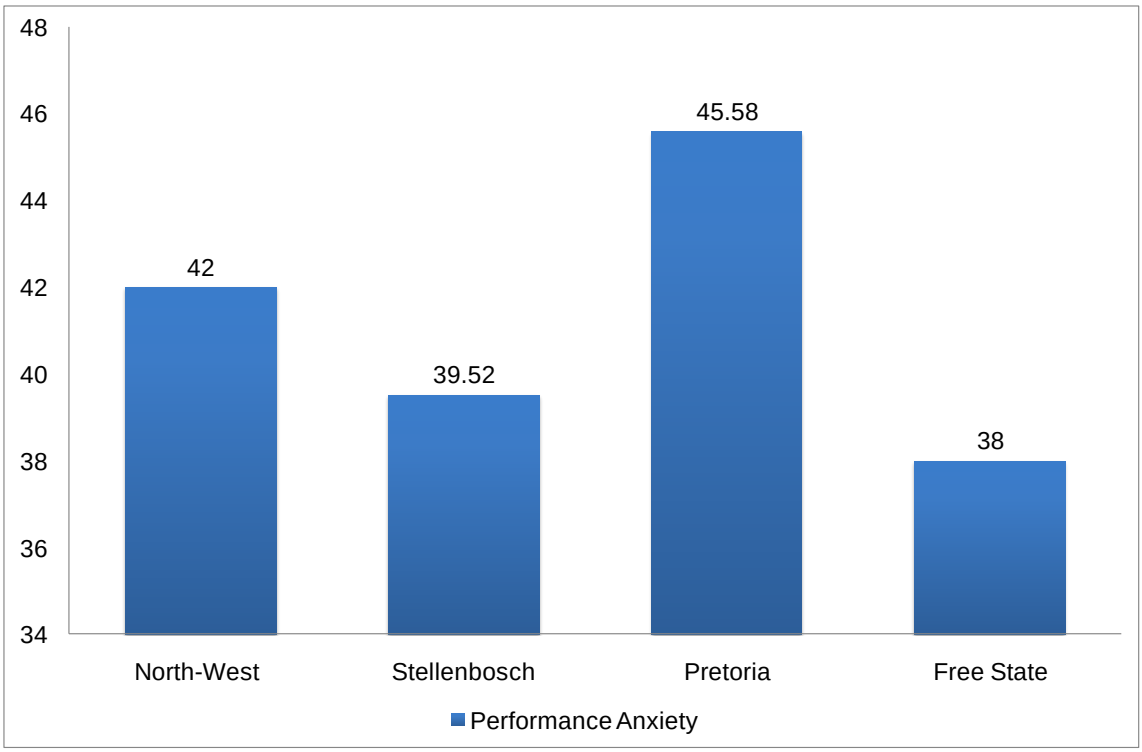

Figure 13: Performance Anxiety Inventory-Revised: Comparisons between universities

4.8.2 Music degree

To explore any statistical differences between the participants from the BA (Music) and BMus degrees, the Mann-Whitney U test was employed on all subscales of the questionnaire (Table 18). The results suggest differences in perfectionistic tendencies, specifically Parental Expectations and Parental Criticism, and performance.

Table 18: Hypothesis test summary: The distribution is similar for BA (Music) and BMus degrees

	Null hypothesis: The distribution of the following subscale is similar across categories of 'Which course do you follow at the University?'	**Significance**	**Retain the null hypothesis**
1	Concern over Mistakes	.404	✓
2	Personal Standards	.971	✓
3	Parental Expectations	.007	X
4	Parental Criticism	.005	X
5	Doubts about Actions	.319	✓
6	Organization	.493	✓
7	Intrinsic Motivation: Enjoyment	.797	✓
8	Intrinsic Motivation: Challenge	.206	✓
9	Extrinsic Motivation: Outward	.302	✓

10	Extrinsic Motivation: Compensation	.566	✓
11	Performance Anxiety	.021	X

Asymptotic significances are displayed. The significance level is .05

The MPS delivered statistical significant differences on two of the subscales (Figure 14). The Parental Expectations subscale of the MPS presented significantly higher scores for the BA (Music) students (16.26) than the BMus students (11.82). Similarly, the Parental Criticism subscale revealed higher scores for the BA (Music) participants (11.82) compared to the BMus participants (9.83). These differences were significant at the 1% level of significance.

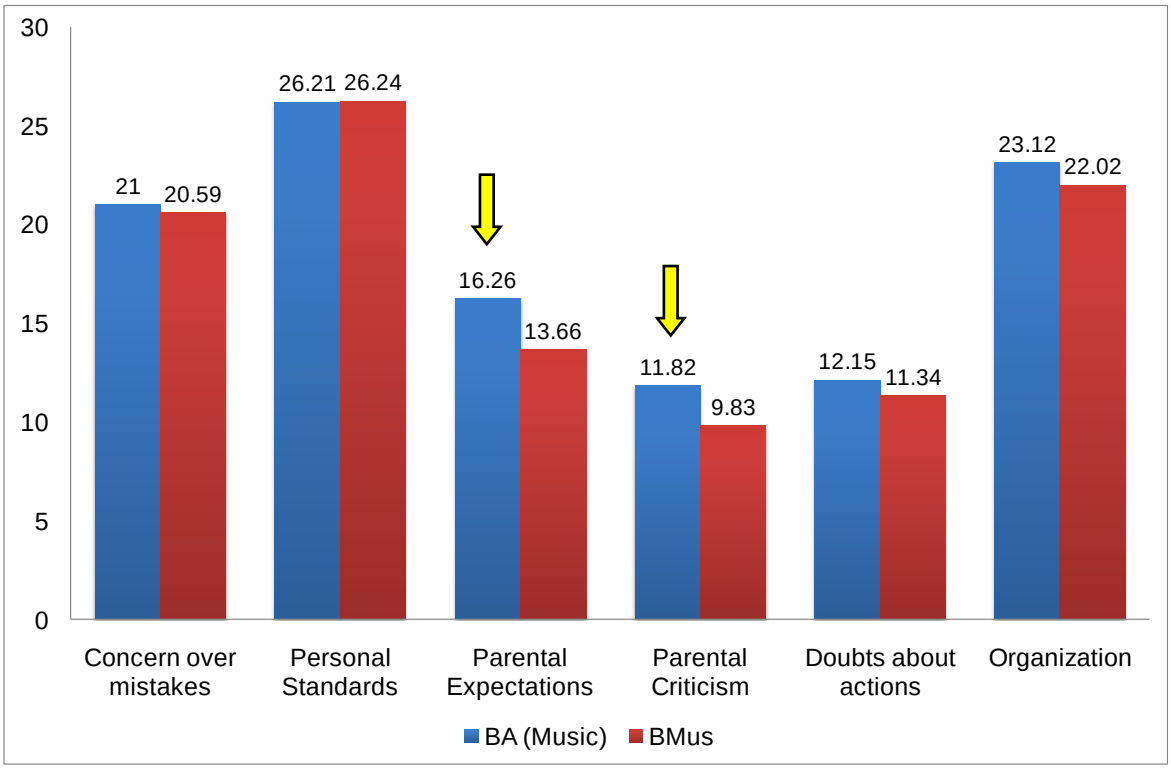

Figure 14: Multidimensional Perfectionism Scale: Comparisons between BA (Music) and BMus degrees

A closer look at the motivation tendencies revealed fairly similar scores for the BA (Music) and BMus students on all subscales of the WPI (Figure 15).

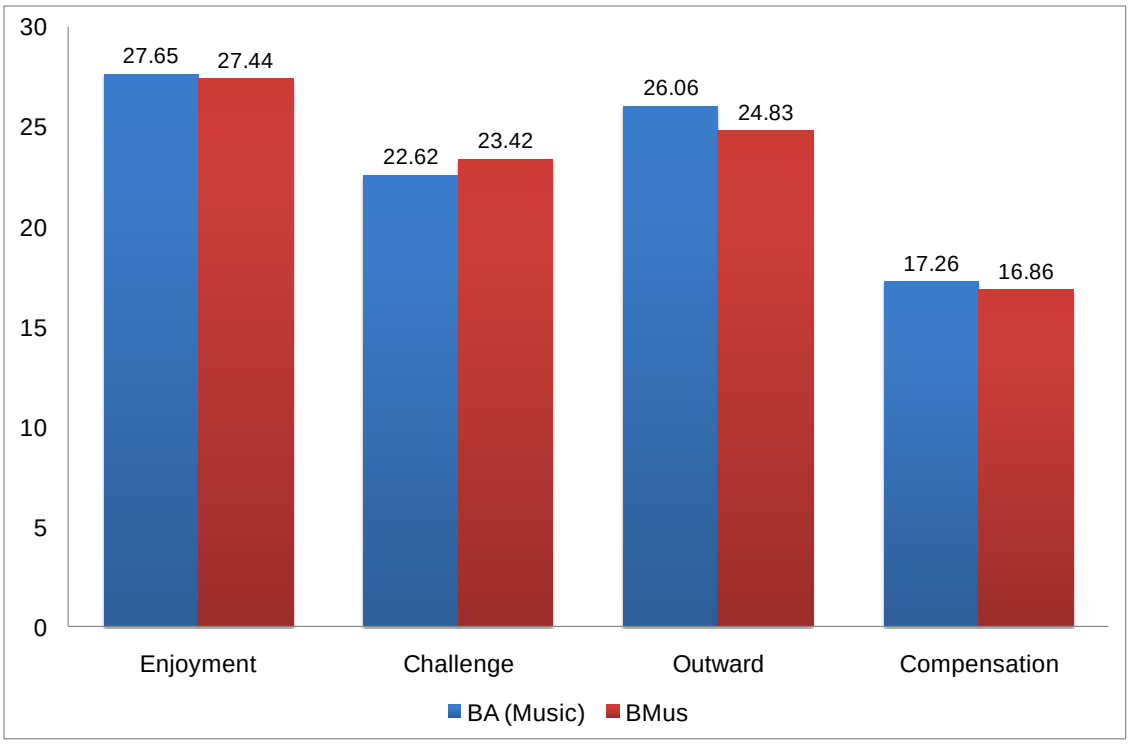

Figure 15: Work Preference Inventory: Comparisons between BA (Music) and BMus degrees

The PAI-R indicated statistical significant differences between the BA (Music) and BMus students. In Figure 16 it is evident that the BA (Music) students (45.76) scored significantly higher than the BMus students (39.32), with the significance level at 5%.

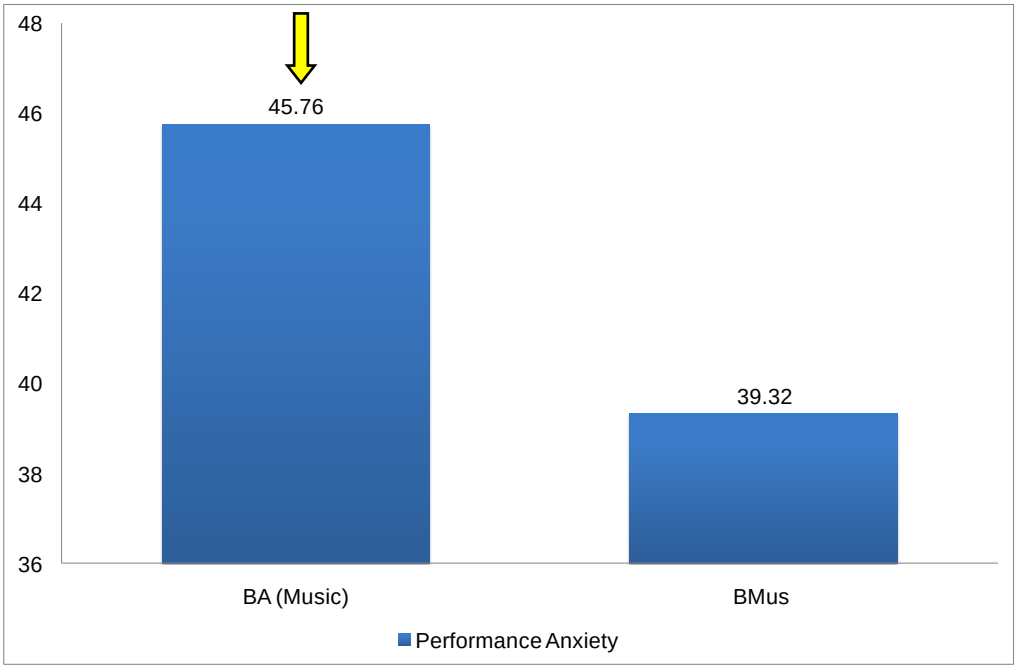

Figure 16: Performance Anxiety Inventory-Revised: Comparisons between BA (Music) and BMus degrees

4.8.3 Academic year of study

Differences between the various years of study were considered by means of the Kruskall-Wallis test (Table 19). The scores of the first, second and third year participants were fairly parallel on all the subscales, thereby implying the absence of any statistical significant differences within the sample.

Table 19: Hypothesis test summary: The distribution is similar across the academic years

	Null hypothesis: The distribution of the following subscale is similar across categories of 'Which year of music studies are you currently enrolled for?'	**Significance**	**Retain the null hypothesis**
1	Concern over Mistakes	.860	✓
2	Personal Standards	.849	✓
3	Parental Expectations	.286	✓
4	Parental Criticism	.217	✓
5	Doubts about Actions	.528	✓
6	Organization	.497	✓
7	Intrinsic Motivation: Enjoyment	.201	✓
8	Intrinsic Motivation: Challenge	.383	✓
9	Extrinsic Motivation: Outward	.512	✓
10	Extrinsic Motivation: Compensation	.073	✓
11	Performance Anxiety	.919	✓

Asymptotic significances are displayed. The significance level is .05

The Multidimensional Perfectionism subscales delivered similar scores for students from the various academic years (Figure17).

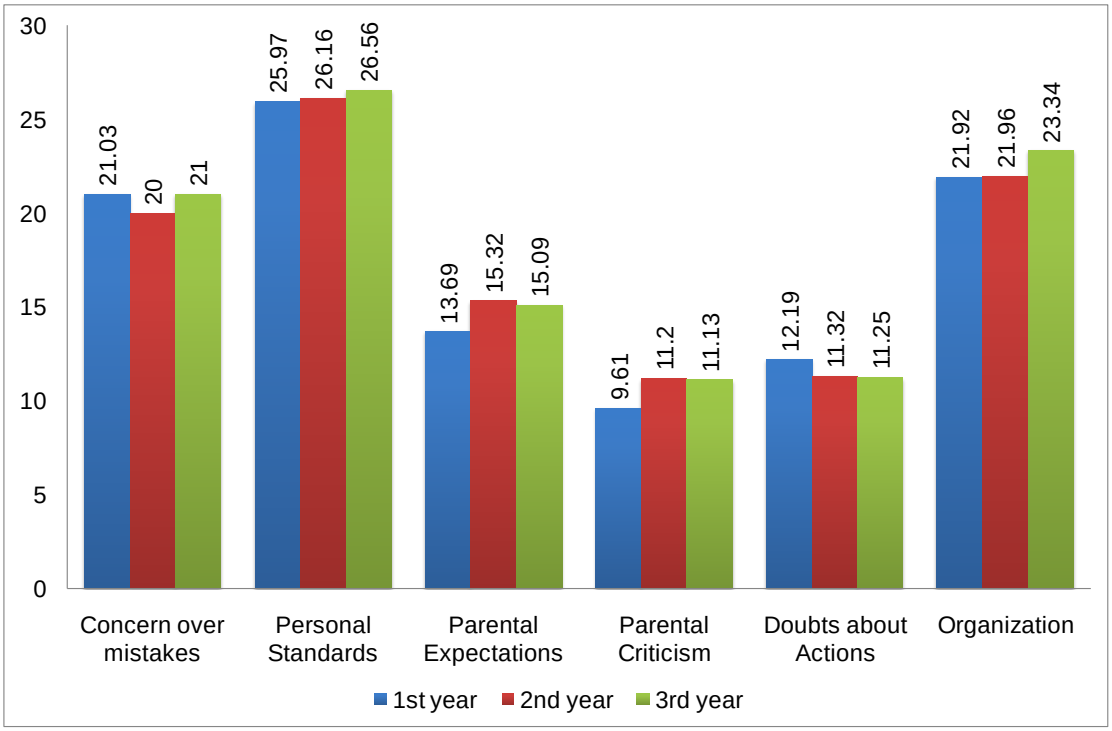

Figure 17: Multidimensional Perfectionism Scale: Comparisons between academic years

No statistically significant differences were found between the years of study and any subscale of the WPI (Figure 18).

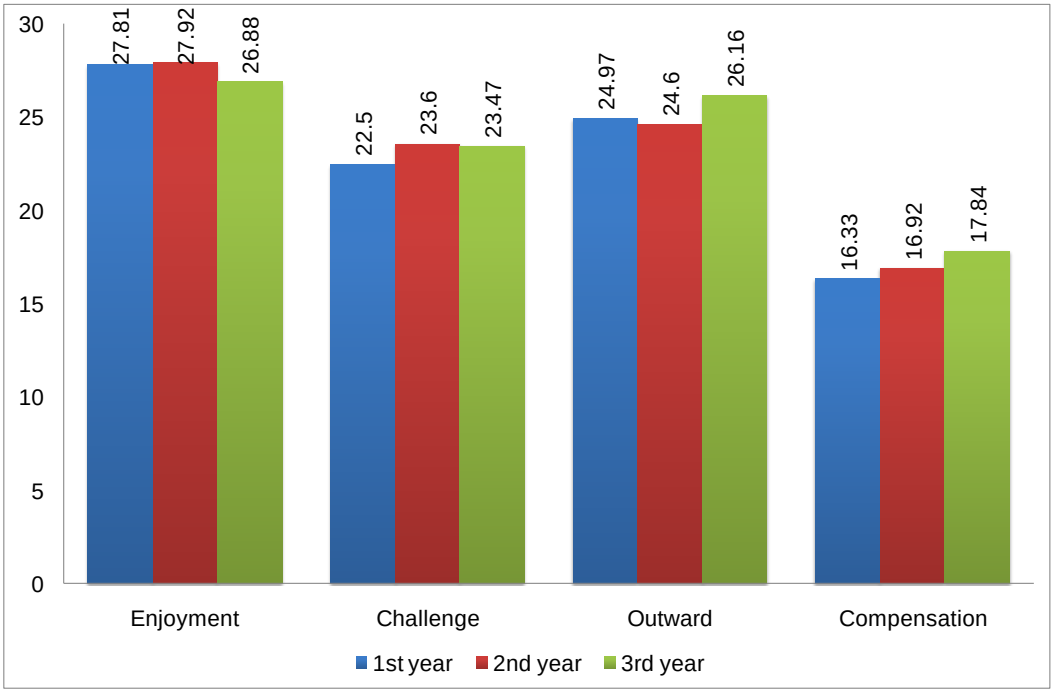

Figure 18: Work Preference Inventory: Comparisons between academic years

The PAI-R displayed slightly lower scores for the second year students (40.68) compared to the first years (42.17) and third years (41.91). These differences were, however, of no statistical significance (Figure 19).

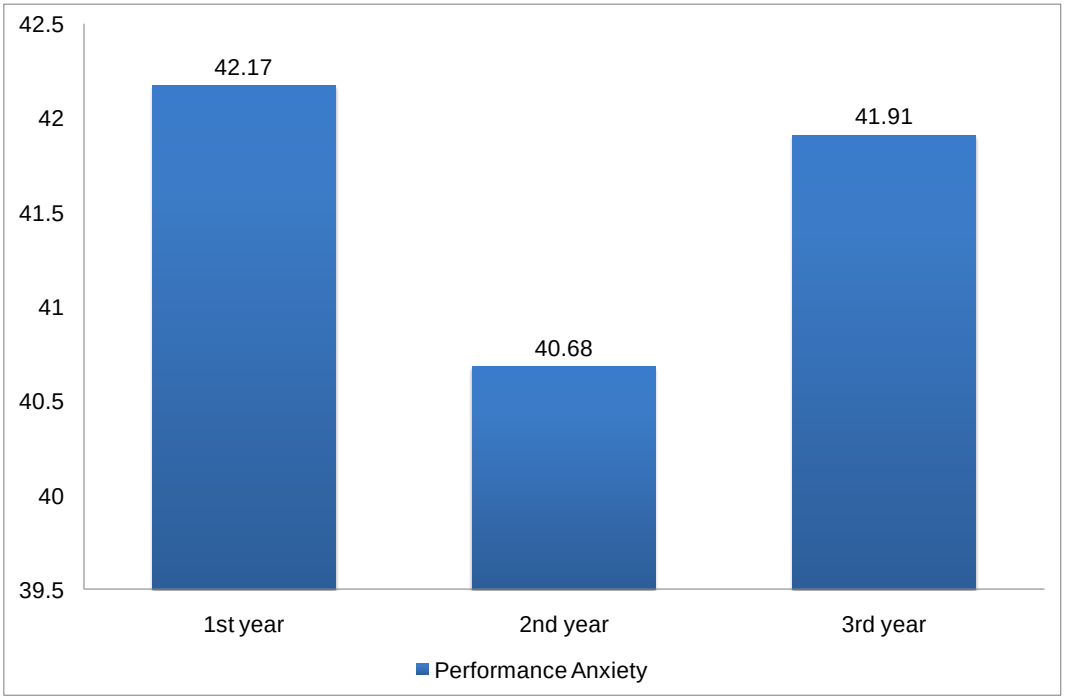

Figure 19: Performance Anxiety Inventory-Revised: Comparisons between academic years

4.8.4. Gender of participants

Gender differences on the subscales of the questionnaire were explored by means of the Mann-Whitney U test (Table 20). The results displayed no significant differences between the genders on any dimensions of perfectionism, academic motivation or performance anxiety.

Table 20: Hypothesis test summary for gender groups

	Null hypothesis: The distribution of the following subscale is similar across categories of 'Please indicate your gender'	**Significance**	**Retain the null hypothesis**
1	Concern over Mistakes	.917	✓
2	Personal Standards	.606	✓
3	Parental Expectations	.617	✓
4	Parental Criticism	.791	✓
5	Doubts about Actions	.901	✓
6	Organization	.978	✓

7	Intrinsic Motivation: Enjoyment	.253	✓
8	Intrinsic Motivation: Challenge	.594	✓
9	Extrinsic Motivation: Outward	.251	✓
10	Extrinsic Motivation: Compensation	.278	✓
11	Performance Anxiety	.210	✓

Asymptotic significances are displayed. The significance level is .05

The MPS delivered relatively comparable scores for both male and female participants (Figure 20), suggesting the absence of any statistical significant gender differences.

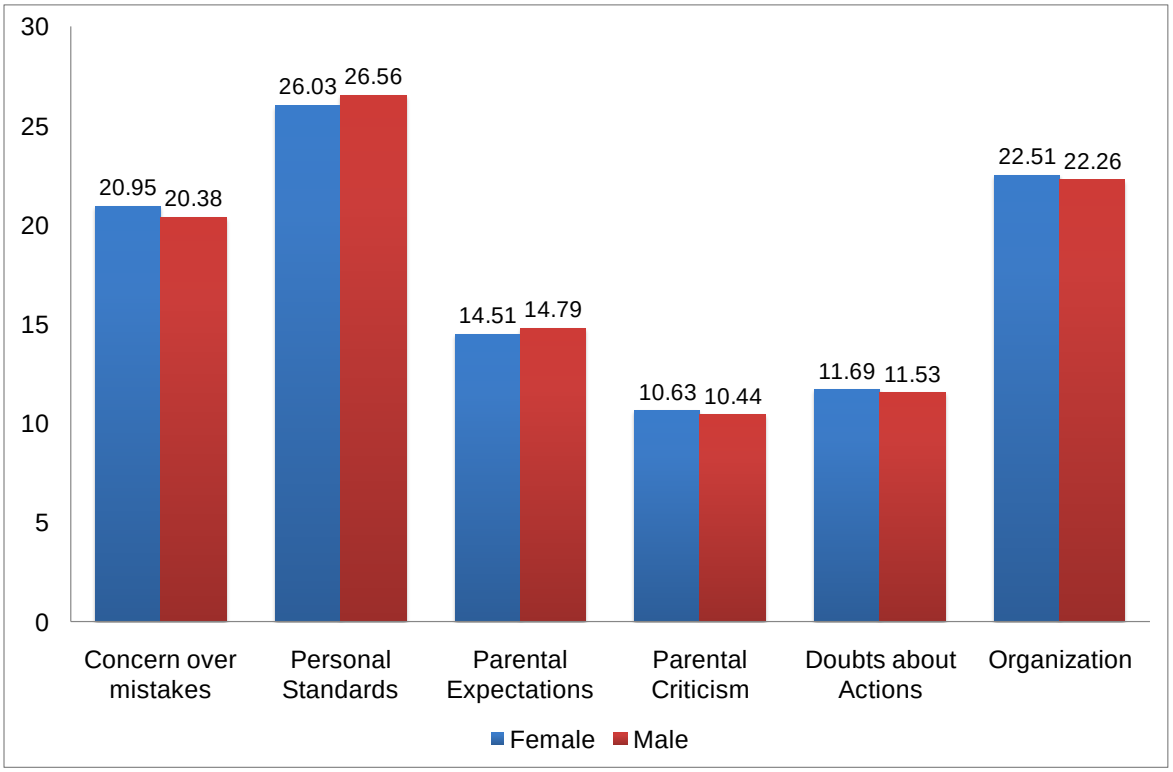

Figure 20: Multidimensional Perfectionism Scale: Comparisons between gender groups

The subscales of the WPI delivered comparable scores between the genders groups (Figure 21), thereby indicating the lack of statistical significant differences.

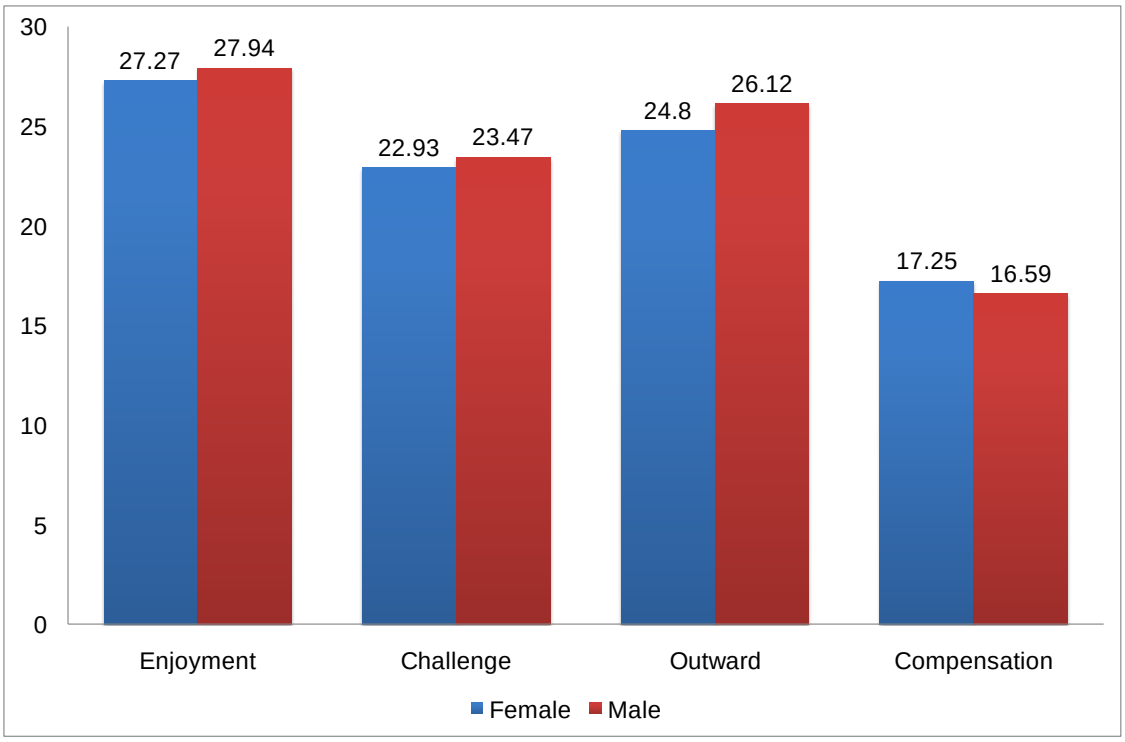

Figure 21: Work Preference Inventory: Comparisons between gender groups

Even though there is mentionable difference in the PAI-R score between the female (42.76) and male (39.79) participants, it is of no statistical significance (Figure 22).

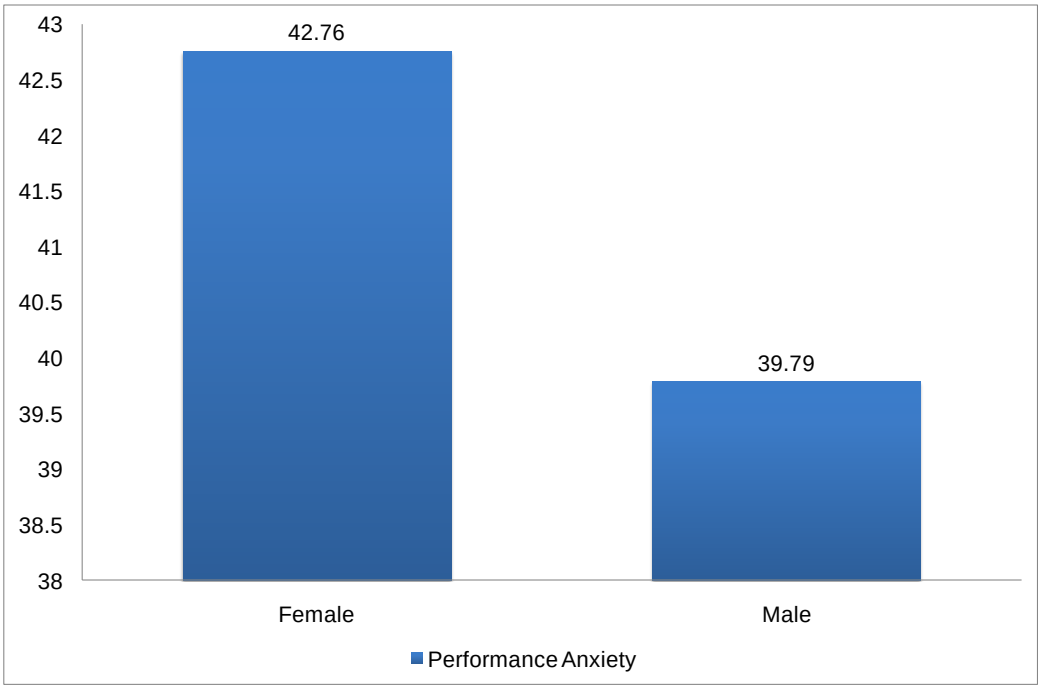

Figure 22: Performance Anxiety Inventory-Revised: Comparisons between gender groups

4.8.5 Home language

At the stage of planning and completion of the questionnaire, the language grouping consisted of Afrikaans, English, and Other languages. However, after processing the data, I found that the Other language group consists of 29 participants – of which 21 are African language speakers, and the remaining 8 are German, Mandarin, and Korean speaking students. As discussed earlier in the chapter[19], I decided to divide the Other language group into two categories: Other and African languages. This made more sense given the South African demographic content. The Other language group now consists of German, Mandarin, and Korean, whereas African languages include IsiXhosa, Sepedi, Sesotho, Setswana, Shona, and Zulu.

The Kruskall-Wallis test was applied to all the subscales of the questionnaire in order to compare the language groups[20] and look for any significant differences (Table 21). Significant differences were found on the MPS, more specifically the Parental Expectations and Parental Criticism subscales.

Table 21: Hypothesis test summary for language groups

	Null hypothesis: The distribution of the following subscale is similar across categories of 'Please indicate your home language'	**Significance**	**Retain the null hypothesis**
1	Concern over Mistakes	.601	✓
2	Personal Standards	.775	✓
3	Parental Expectations	.001	X
4	Parental Criticism	.076	X
5	Doubts about Actions	.557	✓
6	Organization	.611	✓
7	Intrinsic Motivation: Enjoyment	.701	✓
8	Intrinsic Motivation: Challenge	.680	✓
9	Extrinsic Motivation: Outward	.115	✓
10	Extrinsic Motivation: Compensation	.852	✓
11	Performance Anxiety	.734	✓

Asymptotic significances are displayed. The significance level is .05

[19] See p. 95
[20] For the purpose of comparing the various language groups, it was decided to omit the Other language group. The reasons include the lack of linguistic homogeneity within the group, as well as the significantly smaller size compared to the Afrikaans, English and African language groups.

The MPS delivered statistical significant data on the Parental Expectations and Parental Criticism subscales. The students from the African language (17.67) group scored considerably higher than both the Afrikaans (13.37) and English (13.24) students on the Parental Expectations subscale and significantly higher (11.86) than the English (9.29) students on the Parental Criticism subscale. The differences are respectively at the 1% and 5% levels of significance as presented in Figure 23.

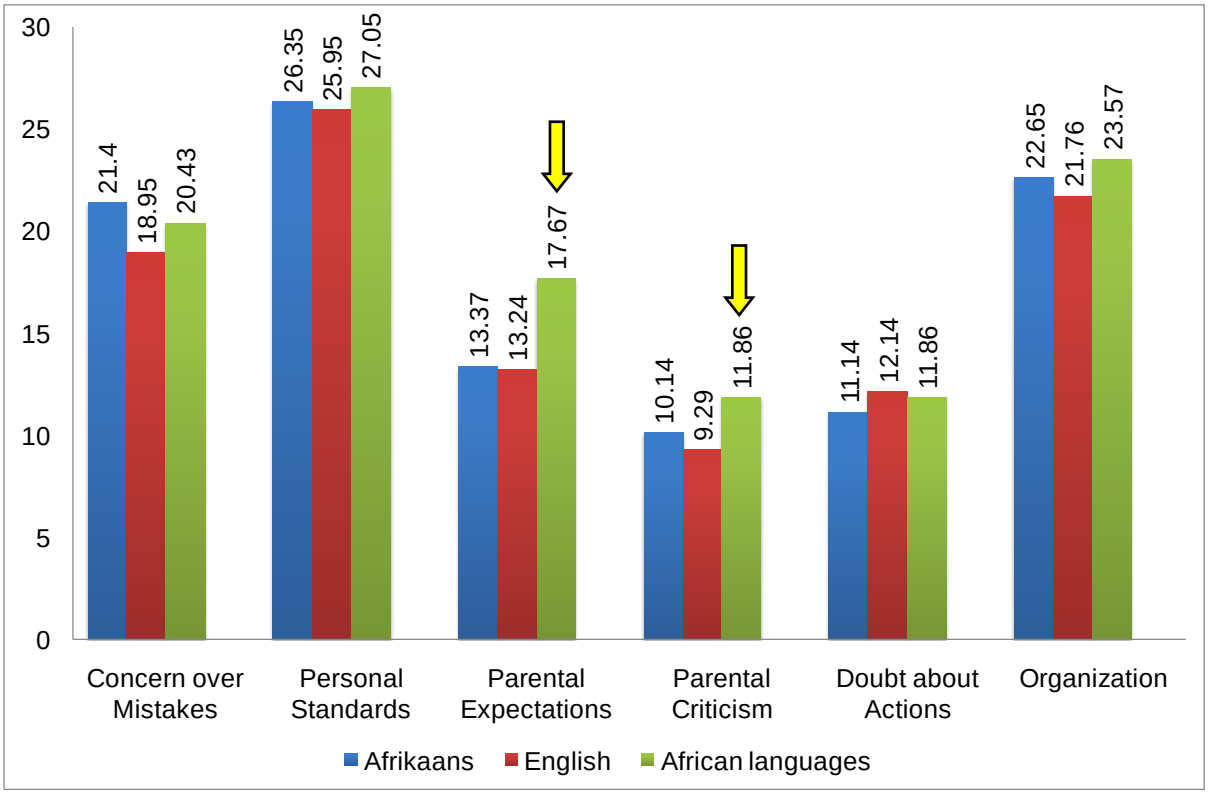

Figure 23: Multidimensional Perfectionism Scale: Comparisons between language groups

The subscales of the WPI display relatively even scores between the language groups (Figure 24), with the most noteworthy difference being between the English speaking (24.05) and African language (26.95) students on the Extrinsic Motivation: Outward subscale. However, the difference was of no statistical significant value.

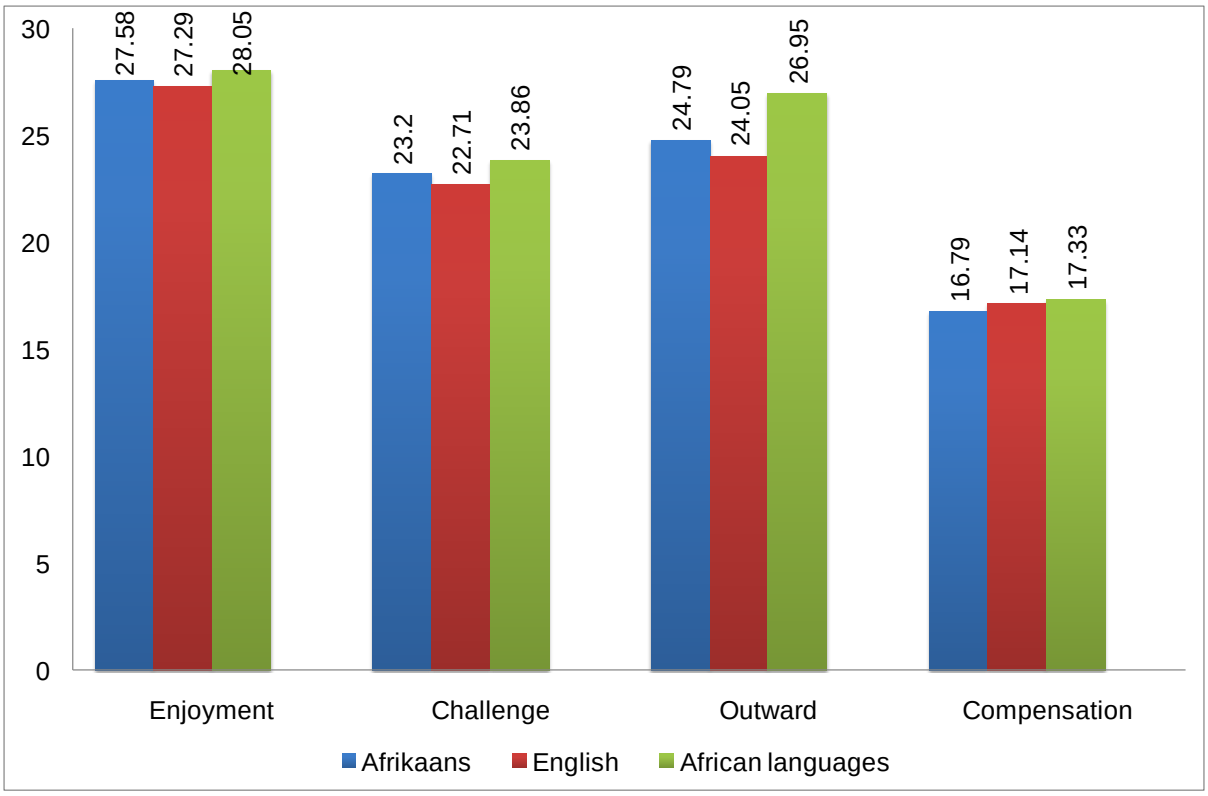

Figure 24: Work Preference Inventory: Comparisons between language groups

The PAI displayed slight differences between the language group scores. The African language group (43.05) scored higher than both the other groups – especially in comparison to the English speaking participants (39.9). The difference was nonetheless statistically insignificant (Figure 25).

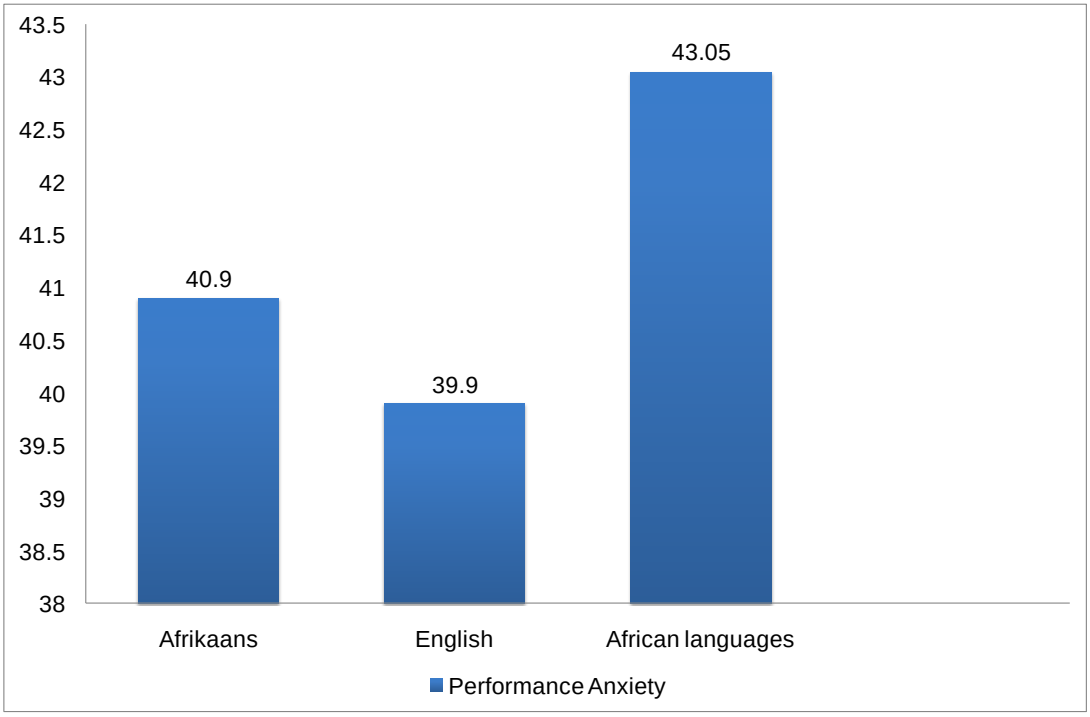

Figure 25: Performance Anxiety Inventory-Revised: Comparisons between language groups

4.8.6 Main music instrument

The main instruments groups were assessed by the Kruskall-Wallis test and the scores on all the subscales of the questionnaire were taken into account (Table 22). Results revealed significant differences – the MPS delivered a significant difference on the Parental Expectations subscale, and the WPI displayed significant results on the Extrinsic Motivation: Compensation subscale.

Table 22: Hypothesis test summary: The distribution is similar across the first instrument groups

	Null hypothesis: The distribution of the following subscale is similar across categories of 'Please indicate your first instrument'	**Significance**	**Retain the null hypothesis**
1	Concern over Mistakes	.082	✓
2	Personal Standards	.145	✓
3	Parental Expectations	.023	X
4	Parental Criticism	.407	✓
5	Doubts about Actions	.371	✓
6	Organization	.247	✓
7	Intrinsic Motivation: Enjoyment	.149	✓
8	Intrinsic Motivation: Challenge	.699	✓
9	Extrinsic Motivation: Outward	.574	✓
10	Extrinsic Motivation: Compensation	.011	X
11	Performance Anxiety	.074	✓

Asymptotic significances are displayed. The significance level is .05

The instrument groups scored similarly on most of the MPS-subscales. The Concern over Mistakes displayed a notable difference between the Strings (23.35) and the Winds (16.64), however, the scores of the Keyboard (21.06) and Voice (20.71) contributed to a more even distribution between the instrument groups – thereby leading to a statistical insignificant result. Similar observations can be made on the Organization subscale between the Keyboard (23.81) and Winds (19.71). However, the Parental Expectations subscale delivered noteworthy results as the Voice (16.75) scored significantly higher than the Winds (12.57). These differences, at the 5% level of significance, are displayed in Figure 26.

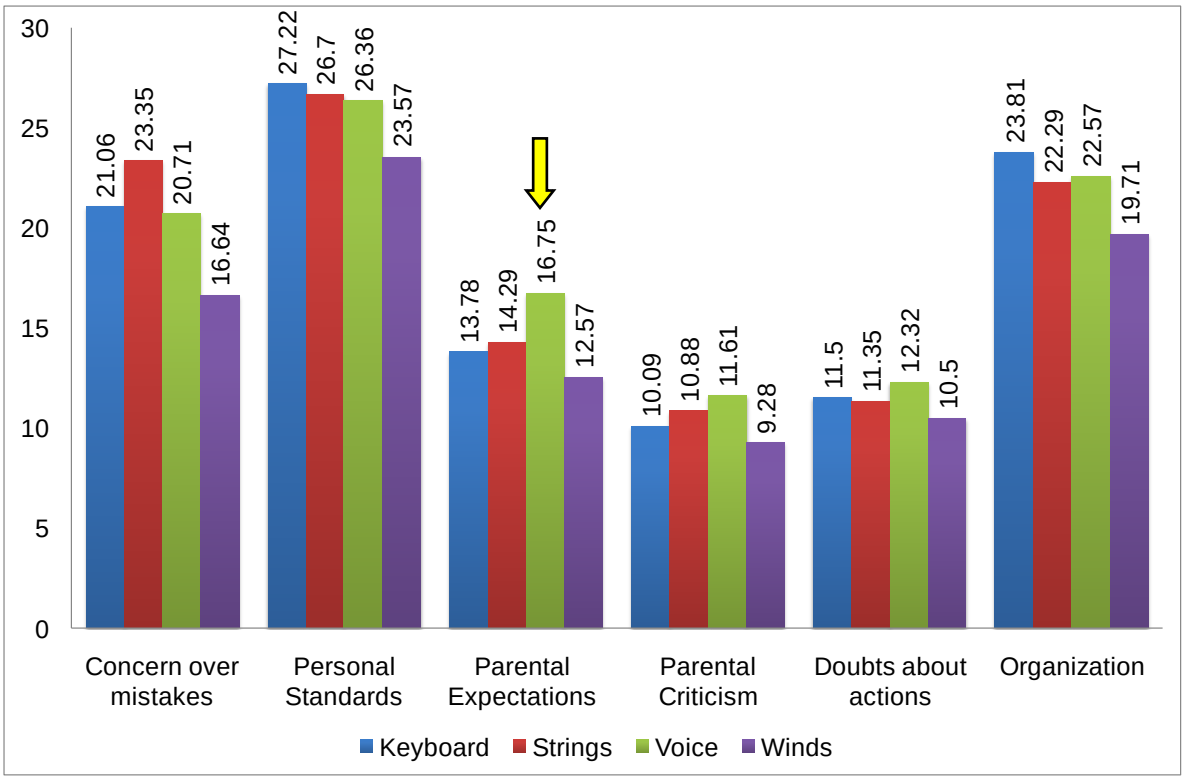

Figure 26: Multidimensional Perfectionism Scale: Comparisons between first instrument groups

The instrument groups delivered mostly similar scores on the subscales of the WPI, with the exception of the compensation subscale (Figure 27). The Keyboard (18.31) displayed statistically significantly higher levels than the Voice (16.36). The difference is at the 5% level of significance.

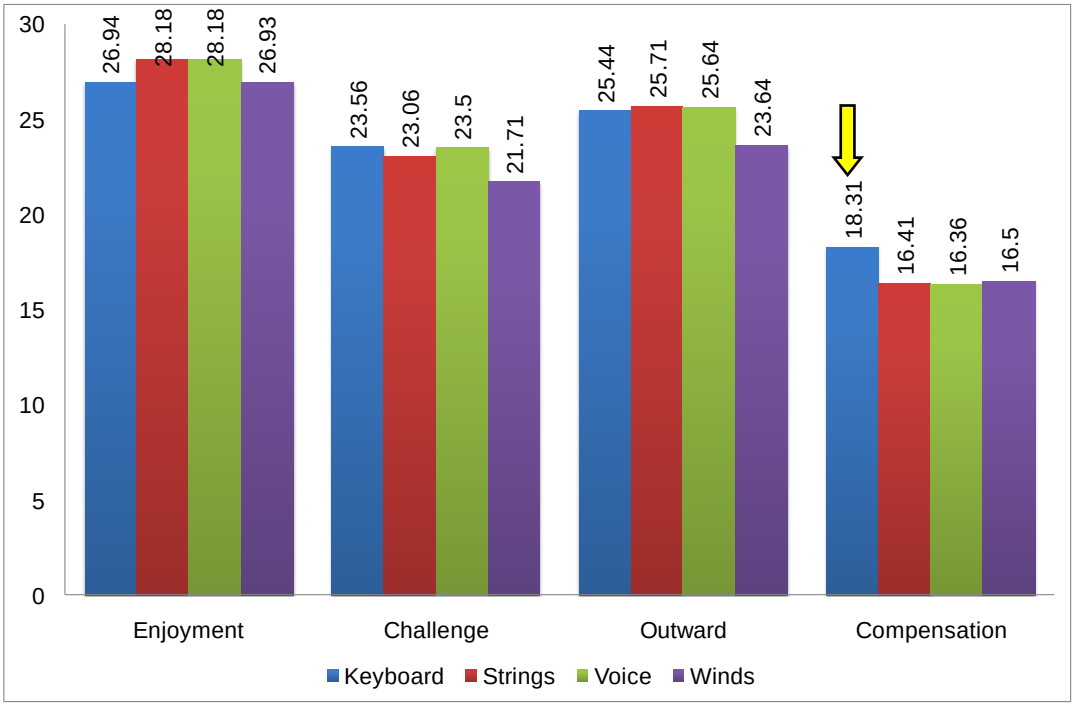

Figure 27: Work Preference Inventory: Comparisons between first instrument groups

The Winds (34.36) scored the lowest on the PAI-R – differing with more than ten units from the Keyboard (44.84). This difference is however, of no statistical significance (Figure 28).

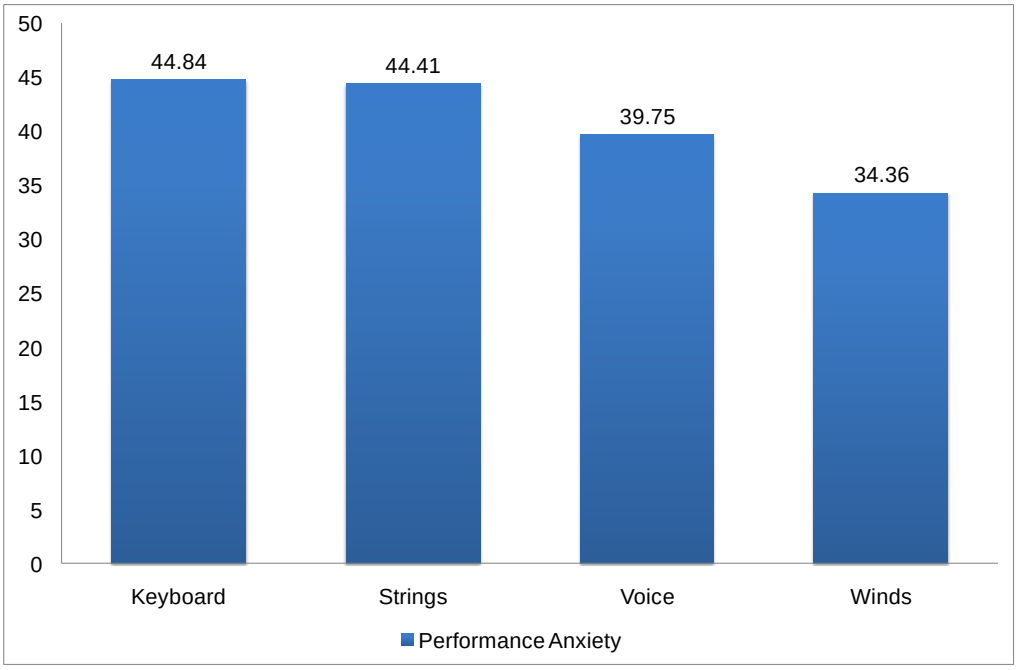

Figure 28: Performance Anxiety Inventory-Revised: Comparisons between first instrument groups

4.9 Summary of results

The initial aim of the study was to explore correlations between perfectionism, academic motivation and music performance anxiety. Upon examination, several significant correlations were found between the various subscales of perfectionism, motivation and anxiety. These results prompted further investigation, and additional tests on the sample variables revealed significant differences in the perfectionistic tendencies, motivational orientations, and anxiety levels in the different South African universities, types of music degrees, home languages and instrument groups.

4.9.1 Correlations between perfectionism, academic motivation and performance anxiety

In studying the relationship between the various aspects of perfectionism, academic motivation and performance anxiety, numerous interesting correlations were found.

- **Correlations between the subscales of the Multidimensional Perfectionism Scale, Work Preference Inventory and the Performance Anxiety Inventory-Revised**

The perfectionistic subscale, Concern over Mistakes, correlated strongly with the Extrinsic Motivation: Outward subscale (r=0.567; p=0.000) – rating as the second strongest

correlation evident in the research data. Other correlations between perfectionism and motivation include moderate relations between Personal Standards and Extrinsic Motivation: Compensation (r=0.493; p=0.000); Parental Criticism and Extrinsic Motivation: Outward (r=0.411; p=0.000); Doubts about Actions and Extrinsic Motivation: Outward (r=0.388; p=0.000); Organization and Intrinsic Motivation: Challenge (r=0.336; p=0.001); and Personal Standards and Intrinsic Motivation: Challenge (r=0.318; p=0.002). Additional significant correlations between perfectionism and motivation, despite being weak, include Parental Expectations and Extrinsic Motivation: Outward (r= 0.298; p=0.004); and Organization and Extrinsic Motivation: Compensation (r=0.283, p= 0.006).

Performance Anxiety displayed a single moderate correlation, and that being with Extrinsic Motivation: Outward (r=0.333; p=0.001). Performance Anxiety also correlated, to a weaker degree, with a few of the perfectionistic subscales including Doubts about Actions (r=0.284; p= 0.006), Parental Criticism (r=0.273; p=0.008), and Concern over Mistakes (r=0.211; p=0.043).

- **Correlations within the Multidimensional Perfectionism Scale**

The strongest correlation resulting from this study was evident between two of the perfectionism dimensions, namely Parental Expectations and Parental Criticism (r=0.584; p=0.000). Further moderate correlations between subscales of perfectionism were found between: Personal Standards and Concern over Mistakes (r=0.462; p=0.000); Parental Criticism and Concern over Mistakes (r=0.453; p.0.000); Doubt about Actions and Concern over Mistakes (r=0.441; p=0.000); and Organization and Personal Standards (r=0.390; p=0.000). Further associations within the perfectionism scale include weak correlations between Parental Expectations and Concern over Mistakes (r=0.241; p=0.020); and Doubts about Actions and Personal Standards (r= 0.223; p=0.031).

- **Correlations within the Work Preference Inventory**

Upon closer examination of the WPI, several correlations were discovered between the subscales of motivation. Intrinsic Motivation: Enjoyment and Intrinsic Motivation: Challenge correlated moderately (r=0.302 and p=0.003); and a weak correlation was found between Extrinsic Motivation: Compensation and Intrinsic Motivation: Challenge (r= 0.226, p= 0.029). The only negative correlation evident in the data was found between two motivation subscales, namely Extrinsic Motivation: Outward and Intrinsic Motivation: Challenge (r= -0.249, p= 0.029).

4.9.2 Comparisons between universities, music degrees, academic year, gender, language and main instrument

The data revealed striking differences in perfectionism, academic motivation and performance anxiety between the universities, music degrees, language groups and first instruments.

- **Academic institution**

Participants from the North-West University displayed statistical significant results on both the perfectionistic dimensions of Parental Expectations and Parental Criticism. They scored significantly higher than the participants groups from the University of the Free State and Stellenbosch University on Parental Criticism, and higher in Parental Expectations compared to the students from Stellenbosch University.

- **Music degree**

Compared to the BMus participants, students enrolled for the BA (Music) degree displayed higher levels of perfectionism, specifically on the Parental Criticism and Parental Expectations dimensions, as well as greater levels of performance anxiety, as indicated by the higher scores on the PAI-R.

- **Home language**

Differences in the home languages were found, as it was discovered that students from an African language background scored higher on both the Parental Expectations and Parental Criticism aspects of perfectionism. The African language participants displayed significantly higher levels of Parental Expectations compared to the Afrikaans and English participants, and significantly higher levels of Parental Criticism compared to the English speaking participants.

- **Main music instrument**

A closer study of the different instrument groups delivered interesting results on the perfectionistic and motivational tendencies, specifically regarding the Voice students. Participants in the Voice group displayed significant higher levels than the Winds, and also scored significantly lower than the Keyboard group on the Extrinsic Motivation: Compensation subscale.

4.10 Conclusion

The results from the study delivered thought-provoking correlations between the different aspects of perfectionism, motivation and performance anxiety. Further investigation revealed differences in perfectionism, motivation and anxiety between students from the different universities, music degrees, home languages and main instruments. This chapter included a detailed presentation of the results of the data. An in depth discussion of the results will ensue in Chapter 5.

CHAPTER 5
Discussion

5.1 Introduction

Perfectionism in music students can be considered from various viewpoints, with musicians either developing perfectionistic tendencies as a result of high academic and artistic demands, or individuals with innate perfectionistic traits being more likely to pursue a career in music. Greater clarity on the perfectionistic aspects in music studies can therefore be obtained by specifically exploring the relation between perfectionism and academic motivation. Furthermore, perfectionism tends to occur comorbidly with anxiety (Burns 1980; Greenspon 2000). For the musician however, perfectionism and performance anxiety are often concurrent experiences (Kenny et al. 2004; Mor et al. 1995). In order to gain an understanding of perfectionism in music students, the relation to both academic motivation and performance anxiety should be considered.

Early definitions of perfectionism, such as “the practice of demanding of oneself or others a higher quality of performance than is required by the situation” (Hollender 1965: 94), and “those whose standards are high beyond reach or reason, people who strain compulsively and unremittingly toward impossible goals and who measure their own worth entirely in terms of productivity and accomplishment” (Burns 1980: 34), already suggest perfectionism as a construct with several dimensions. The multidimensional nature of perfectionism was nevertheless only established decades later by the pioneering research of Frost et al. (1990). Accordingly, perfectionism was considered to consist of six dimensions, namely Concern over Mistakes, Personal Standards, Parental Expectations, Parental Criticism, Doubts about Actions and Organization. However, more recent research has questioned the perfectionistic nature of some of these dimensions. Shafran et al. (2002) pointed out that dimensions like Parental Expectations and Parental Criticism are more likely to be related to the perception of other’s evaluation and expectations of oneself, in contrast to the self-evaluative nature traditionally associated with perfectionism (Frost et al. 1990; Hewitt & Flett 1991b). Similarly, Doubts about Actions may have stronger reference to fears and self-esteem difficulties as opposed to self-criticism which is core to perfectionism (Shafran et al. 2002). The last subscale, Organization, was later omitted from Frost and colleagues’ original multidimensional model (1990) and regarded as a separate concept. The relations with any of these four dimensions of perfectionism should thus be interpreted with the necessary caution and understanding.

The interaction between perfectionism, motivation and anxiety has been investigated. Stoeber and Eismann (2007) considered how perfectionism relates to motivation, effort, achievement and distress in a sample of 146 musically gifted high school students. Results indicated that perfectionistic strivings was associated with intrinsic motivation, increased effort and higher levels of achievement. In contrast, negative reactions to imperfection (perfectionistic concerns) were associated with increased levels of extrinsic motivation and anxiety.

The current study extends research on the multidimensional aspect of perfectionism to include the context and experience of tertiary music students in South Africa. The data obtained from a sample of 93 undergraduate music students from four universities shed some light on the relations between perfectionism, academic motivation and music performance anxiety. The correlations were measured by means of the MPS (Frost et al. 1990), WPI (Amabile et al. 1994), and PAI-R (Rae & McCambridge 2004). This chapter will provide a detailed discussion of the data presented in Chapter 4. Firstly, the relations between perfectionism and academic motivation, perfectionism and performance anxiety, and academic motivation and performance anxiety will be considered respectively. Thereafter the internal dynamics of perfectionism will be discussed by referring to correlations between the different dimensions. Similarly, the relations between the motivational orientations will be considered. The discussion will follow with a contemplation of the differences in perfectionism, motivation and anxiety levels between the confounding variables within the sample. Variables include academic institution, type of music degree, academic year of study, gender, first language and main music instrument. The chapter will conclude with a brief summary.

5.2. Perfectionism and academic motivation

Perfectionism is a complex state characterised by both adaptive and maladaptive dynamics. Its influence on the individual's academic motivation has been the topic of interest in several studies thus far. In general, associations between self-oriented perfectionism and intrinsic motivation, as well as socially-prescribed and extrinsic motivation were found (Accordino et al. 2000; Mills & Blankstein 2000; Miquelon et al. 2005; Speirs Neumeister & Finch 2006).

The current study explored perfectionism in detail and aimed to understand the relations between the multiple dimensions of perfectionism, namely Concern over Mistakes, Personal Standards, Parental Expectations, Parental Criticism, Doubts about Actions and Organization, as well as the intrinsic and extrinsic facets of motivation, such as Intrinsic Motivation: Enjoyment, Intrinsic Motivation: Challenge, Extrinsic Motivation: Outward and Extrinsic Motivation: Compensation. Several statistically significant findings revealed interesting correlations between perfectionism and academic motivation.

Concern over Mistakes and Extrinsic Motivation: Outward

The first dimension of perfectionism, Concern over Mistakes, displayed a strong positive correlation with Extrinsic Motivation: Outward, suggesting that a higher level of fear regarding the making of mistakes is related to greater levels of outwardly directed extrinsic motivation. Accordingly, students' fear of making mistakes is driven by the perceived recognition, expectations and standards of significant others, such as parents, peers and audience members, which can be expected due to the performance-pleasing demands of a music career. Previous research supports this result by proposing a relation between socially-prescribed perfectionism and extrinsic motivation (Hewitt & Flett 1991b; Mills & Blankstein 2000; Miquelon et al. 2005).[21]

Mills and Blankstein (2000) also made use of the WPI to measure motivation in university students. In addition to the relation between socially-prescribed perfectionism and Extrinsic Motivation: Outward, they suggest a significant decrease in Intrinsic Motivation: Challenge in reaction to increasing levels of socially-prescribed perfectionism. Although the current study also found a negative correlation between Intrinsic Motivation: Challenge and the Concern over Mistakes subscale of perfectionism, the result had no statistical significance. It is important to note the difference in participants, Mills and Blankstein's study included 207 students, in contrast to the 93 music students in the current study. It is possible that a comparable sample size could have increased the statistical probability and produced similar results.

Personal Standards, Extrinsic Motivation and Intrinsic Motivation: Challenge

The analysis of the Personal Standards dimension of perfectionism revealed several correlations with motivation. Firstly, the dimension of perfectionism displayed a moderately strong correlation with Extrinsic Motivation: Compensation, as well as a moderate correlation with Intrinsic Motivation: Challenge. Personal Standards also showed a moderately weak

[21] Concern over Mistakes can be interpreted as one of the more socially prescribed dimensions of perfectionism due to its characteristic distress concerning admiration from others.

correlation with Extrinsic Motivation: Outward. These results imply that the higher the personal benchmarks set by the individual, the greater the role of challenge, compensation, and to a lesser degree, the recognition from others, in the motivation orientation. One can therefore assume that students who tend to set high standards for themselves are driven by both the challenge and the possible incentive resulting from achieving and reaching their personal goals, as well as the acknowledgement from significant others. Similarly, these correlations can be interpreted the other way around. For example, engaging in tasks involving compensatory, challenging, or outward aspects are possible indicative of high personal standards.

These findings are supported by previous research suggesting that self-oriented perfectionism is positively related to both intrinsic and extrinsic motivation (Mills & Blankstein 2000). The correlation between Personal Standards and Extrinsic Motivation: Outward is comparable to research by Wentzel (1994) suggesting a relation between academic goals and recognition from educators. However, the current study did not pinpoint the specific external influence involved in the External Motivation: Outward dimension, as the term 'others' can refer to educators as well as parents, siblings, peers or a combination of influences.

All three these relations can be drawn back to the Goal Theory (Nicholls et al. 1990) which differentiates between ego-involved and task-involved goals. The assumption can be made that ego-involved goals, ensuring positive evaluations, are the underlying relation between Personal Standards and the Outward and Compensation subscales of Extrinsic Motivation, whereas task-involved goals, aiming to increase competence, are embedded in the correlation between Personal Standards and Intrinsic Motivation: Challenge.

Parental dimensions of perfectionism and Extrinsic Motivation: Outward

There has been much speculation about the contribution of parents in the development of perfectionism (Baumrind 1971; Stoeber & Childs 2011), to such a degree that Frost et al. (1990) attributed two dimensions of perfectionism solely to the perceived role of parents, namely Parental Expectations and Parental Criticism. On the other hand, fewer studies have focused on parents and motivation. Existing theories such as the Control Theory (Connell 1985) and Attribution Theory (Weiner 1985) suggest external influences without specifying the exact source. Upon closer investigation, a single study (Sichivitsa 2007) on parents' contribution to the musical experience of university students was found. The research suggested that those with higher parental involvement and support displayed greater levels of musical appreciation and motivation for future participation. The current study, however,

considered the correlation between the parent-related aspects of perfectionism and intrinsic and extrinsic motivational orientations within a tertiary music context.

As expected, a statistically significant correlation was found between the Parental Expectations and Extrinsic Motivation: Outward dimensions, implying that those perceiving greater parental expectations are more likely to be driven by acknowledgement from others. However, this correlation was not very strong and although the parents' view contributes significantly to perfectionism, it cannot be considered as a main incentive for the student's academic performance. At first glance, this result can be compared to the study of Sichivitsa (2007) on parental involvement and increased motivation for future musical involvement. However, with the Parental Expectations dimension represented by ideas such as "My parents have always had higher expectations for my future than I have" and "My parents have expected excellence from me" (Frost et al. 1990), Sichivitsa (2007) is describing parental support in terms of support and encouragement, one cannot conclude with certainty that parental expectations and parental support are indeed concepts similar enough to enable comparisons between the studies.

Similarly, Parental Criticism displayed a positive correlation with Extrinsic Motivation: Outward, suggesting that higher levels of perceived parental criticism is accompanied by greater levels of an outwardly directed motivational drive. In other words, critical feedback from parents is linked to the acknowledgement from significant others. The opinions of parents appear to play an important role in students' motivation towards their studies, even at a tertiary level. This finding is somewhat contradictory to research by Atlas et al. (2004). In their study on the effects of sensitivity to criticism on the motivation and performance of undergraduate music students, they found that students who measured high in sensitivity to criticism regarded their musical performance as less important. However, Atlas and colleagues studied the effects of criticism from music educators, whereas the current study solely focused on the parental feedback. Furthermore, one can query whether the 'importance of activity' employed by Atlas, Taggart and Goodell is similar to the Extrinsic Motivation: Outward dimension referred to in this study. Perhaps, in the light of Atlas et al.'s results, students' perception of the importance of their music performance is, despite the prominent role of the audience, closer related to intrinsic orientations of motivation after all. Nonetheless, it is interesting to note that parental criticism is related to increased levels of motivation, whereas criticism from music educators displays an opposite trend.

Doubts about Actions and Extrinsic Motivation: Outward

Another significant, although moderate, correlation between perfectionism and motivation is the association between Doubts about Actions and Extrinsic Motivation: Outward. The suggestion drawn from this association is that students' uncertainties regarding their music studies are related to the apparent views and expectations of significant others.

Several factors can contribute to the significance of this association. Firstly, most students are dependent on external sources for financing their studies, including their parents. This may increase the role of external sources on their motivational drive, and also how they perceive their academic abilities. Furthermore, it is important to consider the performance demands of musical studies, which includes both positive and negative feedback from others. In order to be a successful performing musician, one should be attentive to the opinion and expectations of the audience. In a way, one's success is dependent on the view of others, which is quite a subjective measure of achievement. The inevitable experience of rejection, criticism or failure may diminish the belief in one's own competence.

Organization, Intrinsic Motivation: Challenge, and Extrinsic Motivation: Compensation

Having an organized approach to music studies revealed important correlations with academic motivation. The Organization dimension of perfectionism displayed moderate correlations with both the Intrinsic Motivation: Challenge and the Extrinsic Motivation: Compensation dimensions. However, Organization correlated stronger with Challenge than with Compensation, suggesting that those who are intrinsically motivated tend to be more organized than those who are driven by external rewards.

Possible reasoning behind the correlations between Organization and the Challenge and Compensation subscales can be attributed to successful time and task management skills. For example, if one has a challenging task at hand, or an activity which will result in great reward, one may consider following a more structured, organized approach to ensure that it is completed successfully. Although conflicting opinions exist on whether Organization should be regarded as a dimension of perfectionism, or rather be clinically categorised as an obsessive compulsive characteristic (Frost et al. 1990), its relation to motivation cannot be ignored.

5.3 Perfectionism and Performance Anxiety

The art of music performance involves countless hours of concentration, disciplined practise, and precision in the reading and presentation of the music, all of which lends itself to the development of perfectionistic tendencies. It is further interesting to note the similarities

between the definitions of perfectionism and anxiety, with anxiety being ascribed as “sense of uncontrollability…a state of helplessness…because *one is unable to obtain desired results or outcomes*…” (Barlow 2000: 1249) and perfectionism as “excessive concern over making mistakes, high personal standards, perception of high parental expectations and high parental criticism, the *doubting of the quality of one’s actions*, and a preference for order and organization” (Frost et al. 1990: 449). It is therefore reasonable to expect an association between music performance anxiety and perfectionism, as already suggested by a number of studies (Kenny et al. 2004; Mor et al. 1995). The current study confirmed this expectation by revealing statistically significant correlations between performance anxiety and several dimension of perfectionism, specifically Concern over Mistakes, Parental Criticism and Doubts about Actions.

Concern over Mistakes and Performance Anxiety

The general opinion amongst researchers is that self-criticism, specifically rumination over perceived errors, is core to the traditional definition of perfectionism (Frost et al. 1990; Hewitt & Flett 1991a; 1991b). With the relation between perfectionism and performance anxiety having been established, it was not surprising that the results of this study showed a correlation, albeit weak, between the Concern over Mistakes dimension and Performance Anxiety. Sinden (1999), who also made use of the Frost Multidimensional Perfectionism Scale, likewise found a significant correlation between the Concern over Mistakes dimension and Performance Anxiety in a sample of 138 university music students. The Concern over Mistakes dimension was represented with items such as “I should be upset if I make a mistake” and “If I fail partly, it is as bad as being a complete failure”, while the Performance Anxiety Inventory included statements like “If I make a mistake, I usually panic” and “If I were to take an important examination, I would worry a great deal before taking it”. From a personal viewpoint, I can relate to this finding, since the fear of making mistakes, together with the perceived public humiliation, is key one to my experience of music performance anxiety.

Parental Criticism and Performance Anxiety

It was quite surprising to find a statistical significant correlation between Parental Criticism and Performance Anxiety, albeit weak, especially since one would assume that most university students have less contact with their parents compared to their high school years. The initial assumption was that less contact with significant others would decrease the amount of perceived pressure, but it does not appear to be the case. However, since this study did not follow a longitudinal design, the probability exists that the perceived pressure from parents did decrease since leaving school. Nonetheless, the association with anxiety is

still of statistical significance. McLeod et al. (2007) found a weak positive correlation between Parental Criticism and Performance Anxiety stating that parenting style is responsible for 4% of children's anxiety levels. Kenny (2004) explains the relation between parental support and anxiety tendencies more elaborately by referring to Barlow's model of triple vulnerabilities. According to this model (Barlow 2000), anxiety is the product of a set of three integrated weaknesses: a heritable/ biological vulnerability; a generalised psychological vulnerability based on early experiences; and a specific psychological vulnerability connected with environmental stimuli. According to Kenny (2004), musicians with high trait anxiety (biological vulnerability), who grew up in an environment where expectations were high but the support for achieving success was inadequate (generalised psychological vulnerability), and are accustomed to regular and critical evaluations of their performance (specific psychological vulnerability), are prone to experience music performance anxiety. Parental criticism can thus be seen as one of the triggers/ vulnerabilities, specifically a generalised psychological vulnerability, that can contribute to the experience of performance anxiety.

Doubts about Actions and Performance Anxiety

The Doubts about Actions dimension and Performance Anxiety items displayed a weak correlation, implying that uncertainty about academic activities is related to increased levels of performance anxiety. Again, this result is similar to that of Sinden (1999). The association was anticipated, as anxiety and insecurity are similar concepts, and performance anxiety is often ascribed to low self-esteem levels (Ryan 1998; Chan 2011). The outcome was nonetheless partly surprising as a stronger correlation was expected. It should, however, be noted that the Doubt about Actions items included statements like "Even when I do something very carefully, I often feel that it is not quite right", and "I tend to get behind in my work because I repeat things over and over" which referred to academic actions beyond musical performance. Perhaps if the items were limited to performance-related activities, a stronger correlation would have been evident.

5.4 Academic motivation and performance anxiety

Not a lot is currently known about the correlation between motivation and performance anxiety in musicians. It has, however, been suggested that performance anxiety can either be debilitating or facilitating (Papageorgi et al. 2007), thereby implying an inherent association with academic motivation. The current study approached performance anxiety as a debilitating condition, as evident from the items from the Performance Anxiety Inventory-Revised (Rae & McCambridge 2004): "Even when I'm well prepared for an exam, I feel very

anxious about it", "During exams I am so tense that I feel physically ill", and "Thoughts of doing poorly interfere with my performance".

A more researched topic in music performance is flow (Bakker 2005; O'Neill 1999; Wrigley & Emmerson 2011), which can be explained as the experience of becoming absorbed in an activity while simultaneously effectively expressing your skill without analysing the process (Csikszentmihalyi 1990; 1997). Flow is per definition related to both motivation and anxiety, as flow-producing activities are pursued specifically for the intrinsic enjoyment they yield, and the state of flow automatically reduces anxiety. Therefore, the initial hypothesis was that this study would deliver a negative correlation between Intrinsic Motivation: Enjoyment and the Performance Anxiety. However, such a hypothesis is superficial for several reasons. Firstly, one cannot assume that all music students necessarily experience flow/ intrinsic enjoyment from performing; and secondly, of the eight items of the Enjoyment subscale, only one item represented an item related to flow, "I enjoy doing work that is so absorbing that I forget about everything else". Thus, although one might have expected an inverse correlation between Intrinsic Motivation: Enjoyment and Performance Anxiety, it is in fact not realistic since the Work Preference Inventory did not thoroughly measure aspects of enjoyment related to the experience of flow.[22]

Extrinsic Motivation: Outward and Performance Anxiety

This study revealed a statistically significant association between motivation and anxiety, which includes a moderate correlation between Extrinsic Motivation: Outward and Performance Anxiety. This finding suggests that being driven by the recognition from others or external rewards are related to increased levels of performance anxiety. This relation is quite rational, perhaps even more so in a music performance setting where the success of the performer is often, if not always, dependent on the approval of audience members, or the *recognition from others.* In the highly competitive sphere of the performing arts, it is plausible that musicians' search for approval from significant individuals can contribute to increasing levels of performance anxiety. Studies supporting this association include research by Brotons (1994), Kenny (2004) and LeBlanc et al. (1997).

5.5 Correlations within perfectionism

Perfectionism is a complex construct consisting of various interacting components (Frost et al. 1990; Hewitt & Flett 1991b). The current study considered how different perfectionistic tendencies correlated with one another in a music tertiary context. The six dimensions, as

[22] See section 5.6.2, p 132 for a further discussion on the matter.

identified by Frost, Marten, Lahart and Rosenblate (1990) in the Multidimensional Perfectionism Scale, include Concern over Mistakes, Personal Standards, Parental Expectations, Parental Criticism, Doubts about Actions and Organization. The following section will discuss the significant correlations between the various dimensions of perfectionism,[23] and also compare it with the original correlations found during the development of the Multidimensional Perfectionism Scale (Frost et al. 1990).

The first dimension, **Concern over Mistakes** is, as mentioned earlier, regarded as one of the traditional definitions of perfectionism, with self-critical and self-evaluative elements at the core. This "traditional" dimension of perfectionism correlated significantly with all the other dimensions, with the exception of the Organization dimension. Concern over Mistakes correlated moderately with three of the dimensions, namely Personal Standards, Parental Criticism and Doubts about Actions, and weakly with the Parental Expectations dimension. Concern over Mistakes therefore has some mutual or shared aspects with each of these dimensions. For example, it is suggested that an increased fear about making mistakes is related to high personal goals, perceived parental criticism, as well as greater uncertainty about one's actions. The concern about making errors furthermore displayed a relation to higher perceived parental expectations, however, to a weaker extent. These associations are fairly comparable with what Frost et al. (1990) found, as the Concern over Mistakes similarly revealed moderate correlations with the Personal Standards, Parental Criticism, and Doubts about Actions dimensions. They likewise found an association between Concern over Mistakes and Parental Expectations, but unlike the current study's weak relation, the dimensions displayed a moderate correlation. With regards to the Organization dimension, Frost, Marten, Lahart and Rosenblate (1990) found, in contrast to this study, a correlation between Concern over Mistakes and Organization. The fact that the current study failed to deliver a meaningful correlation between Concern over Mistakes and Organization is nevertheless in line with the development of the Multidimensional Perfectionism Scale, since Frost et al. deliberately omitted Organization as one of the dimensions in their later studies (Frost et al. 1990).

The **Personal Standards** dimension of perfectionism displayed, in addition to the moderate positive correlation with Concern over Mistakes, significant correlations with two of the other dimensions of perfectionism. A moderate correlation was evident between Personal Standards and Organization, implying that more ambitious personal goals are connected with a more structured academic approach. Frost et al. found a similar result in their study

[23] The results of the correlations are included in Chapter 4, section 4.6.2, p.81.

(1990). Secondly, a weak correlation was evident between Personal Standards and Doubts about Actions, suggesting that higher personal standards are associated with greater uncertainty about performance. This relation is a somewhat confusing, as one can argue that it requires elevated levels of self-confidence in order to set high personal standards. Literature on self-efficacy, which can be regarded as the opposite of "Doubts about Actions", have indicated that the belief in one's abilities is the greatest predictor of success within a musical performance setting (McCormick & McPherson 2003). It is therefore surprising to find that a similar correlation between Personal Standards and Doubts about Actions was also found in the original study (Frost et al. 1990). The only possible explanation upon which I can turn, is that perhaps, in order to strive for excellence and improve personal standards, a certain amount of doubt over one's actions and critical reflection is necessary. I however hold no current knowledge of any studies supporting this notion.

Thirdly, the **Parental Expectations** dimension of perfectionism displayed a strong correlation with Parental Criticism, in addition to the correlation with Concern over Mistakes. The implication is that higher aspirations from parents are related to greater disapproval from them. The original study on the Multidimensional Perfectionism Scale (Frost et al. 1990) found a similar relation between Parental Expectations and Parental Criticism. This correlation is in line the "parental pressure" hypothesis on the origins of perfectionism (Stoeber & Childs 2011). According to this hypothesis, parental pressure consists of parental expectations and the resulting parental criticism should the child fall short in meeting the aspirations.

Parental Criticism revealed a weak correlation with Doubts about Actions. One can assume that feeling uncertain about one's abilities or performance could be associated with parental disapproval, or phrased differently, that parents tend to be more critical in situations where the individual displays insecurity regarding their own actions. The parenting style hypothesis on the origins of perfectionism can possibly account for this correlation (Stoeber & Childs 2011). According to the parenting style hypothesis, the psychologically controlling parenting style is characterized by a "highly evaluative way of interacting" (Craddock et al. 2009: 137), in this case critical feedback, which is related to increased levels of dysfunctional perfectionism (Soenens et al. 2008), such as insecurity about one's abilities.

The **Doubts about Actions** dimension displayed no other statistically significant associations other than the correlations with Concern over Mistakes, Personal Standards, and Parental Criticism. Lastly, the **Organization** dimension correlated, as discussed earlier, with only one of the other dimensions, namely Personal Standards.

5.6 Academic motivation

Research on motivation in music has been studied from an educational perspective (Davidson et al.1996; Sloboda & Howe 1991; Sosniak 1985), focusing mainly on the teacher's role. Surprisingly few studies have considered the motivational mechanisms involved in the persistence of professional musicians (Smith 2005), despite the fact that the majority of musicians spend many hours preparing for performances, both in solitude and in collaboration with fellow musicians. The degree of commitment and motivation involved can be compared to occupations such as ballet dancers and gymnasts (Vallerand et al. 2003) and is regarded as a complex interaction between a number of individual and environmental factors. Hallam (2002) proposed in her model of music motivation, that the personality, self-concept and self-esteem of the musician are influenced by environmental factors, such as social feedback. Motivation can therefore be intrinsic, extrinsic, self-generated or reinforced by others. Interesting to note is that all the motivational patterns can deliver comparable outcomes, as research found performance levels to be similar regardless of the motivational drive (Hallam 2002).

In considering motivation from an educational perspective, Amabile et al. (1994) designed the WPI and categorised motivation according to intrinsic and extrinsic dimensions. The four categories include Enjoyment and Challenge (Intrinsic Motivation), and Outward and Compensation (Extrinsic Motivation). The current study explored the academic motivation of university music students according to the four subscales, namely Intrinsic Motivation: Enjoyment, Intrinsic Motivation: Challenge, Extrinsic Motivation: Outward and Extrinsic Motivation: Compensation. The motivational tendencies of the music participants will now be discussed according to the correlations between the subscales, as well as the results on each individual subscale.

5.6.1 Correlations within motivation

As most people are driven by a combination of interacting motives (Harter 1985; Connell 1985; Pintrich 1989), correlations between the intrinsic and extrinsic dimensions were expected. Some suggest that a single activity can be driven by both intrinsic and extrinsic factors, with the relationship depending on the nature of the task (Deci 1971; Calder & Straw 1975; Lepper et al. 1973). The study revealed important motivational tendencies amongst music students.

The results suggest that challenge plays an important part in the dynamics of the music student's motivation, as the Intrinsic Motivation: Challenge subscale correlated significantly with all three of the other subscales. The two dimensions of Intrinsic Motivation, Intrinsic

Motivation: Enjoyment and Intrinsic Motivation: Challenge, related moderately with one another. This association was predictable due to the intrinsic nature of both these dimensions. In terms of the relations between the intrinsic and extrinsic aspects of motivation, a weak association was evident between the Intrinsic Motivation: Challenge subscale and the Extrinsic Motivation: Compensation dimension. This finding is supported by Hallam (2002) who suggests that an external reward indicating competence is likely to increase intrinsic motivation. Research by Amabile et al. (1994), however, suggests the contrary by finding a negative correlation between the Intrinsic Motivation: Challenge and Extrinsic Motivation: Compensation subscales. The inconsistency between the current study and the study by Amabile et al. (1994) could be explained from a social information processing perspective (Salancik & Pfeffer 1978). Contextual factors, such as countries (South Africa and North-Eastern USA), universities and field of study (classical music opposed to literature and psychology majors), together with past choices can influence individuals' attitudes towards their studies. A further significant, albeit weak association, was found between the subscales Intrinsic Motivation: Challenge and Extrinsic Motivation: Outward.[24] This is, however, in line with the findings by Amabile et al. (1994).

It is evident from these results that there are intricate relations between motivational drives which confirms the complex interactive nature of motivation. The dynamics of motivation will now be further discussed with specific reference to the Intrinsic Motivation: Enjoyment subscale.

5.6.2 Intrinsic Motivation: Enjoyment

The enjoyment of an activity requiring high levels of motivation can be compared to the concept of passion. The Dualistic Model of Passion (Vallerand et al. 2003) distinguishes between two types of passion, harmonious passion and obsessive passion. Harmonious passion involves autonomous internalisation and results when an individual freely engages in an activity for the enjoyment thereof, without experiencing internal or external pressure. In contrast, obsessive passion results from controlled internalisation of an activity and involves internal and external pressure. There are definite links between passion and intrinsic motivation (Deci & Ryan 1985a; Vallerand 2008). Intrinsically motivated individuals engage in an activity for the inherent fulfilment it provides. Both passion and intrinsic motivation share the characteristic of an enjoyment for the activity involved (Bonneville-Roussy et al. 2011). However, unlike intrinsic motivation, passion involves making the activity an important part of the individual's self-identity.

[24] The relation between Intrinsic Motivation Challenge and Extrinsic Motivation Outward is the only negative correlation in the study. All the other correlations are of a positive nature.

The Enjoyment subscale of Intrinsic Motivation delivered interesting patterns amongst the music students in this study. Firstly, although not of statistical importance,[25] enjoyment scored the highest of all the motivational subscales, suggesting that the pleasure derived from music is more important than the challenge, reward or recognition it can provide. The choice to pursue a career in music seems to be driven firstly, by the intrinsic enjoyment it provides, followed by the recognition from others and the personal challenge, and lastly, the external rewards. Enjoyment's dominant ranking may suggest the presence of harmonious passion (Vallerand et al. 2003) and autotelic tendencies (Csikszentmihalyi 1975; 1990; 1997) as motivational drives among the music students. According to Csikszentmihalyi (1997) an autotelic individual tends to gain intrinsic motivation and flow from daily activities, such as practising one's instrument. The state of flow consists of the following core elements: "absorption, or an intense concentration and involvement in the task, enjoyment of the performance of the task, and intrinsic motivation, which refers to the fact that the performance of the task is motivation in itself, and does not require any external regulation or reward" (Bakker 2008; Demerouti 2006; Nielsen & Cleal 2010, in Fullagar et al. 2013).

Furthermore, Intrinsic Motivation: Enjoyment was the only subscale of motivation to not correlate significantly with any of the dimensions of perfectionism, possibly suggesting a different underlying mechanism in comparison to the other three motivational subscales. The hypothesis is that the items of the Enjoyment subscale, as it appears in the WPI (Amabile et al. 1994), are perhaps closer related to harmonious passion than intrinsic motivation. Items such as, "I enjoy doing work that is so absorbing that I forget about everything else" and, "It is important for me to be able to do what I most enjoy" encourage this theory. The "flexible persistence" of harmonious passion typically leads to positive experiences (Bonneville-Roussy et al. 2011: 124), which can possible explain the lack of a relationship with the self-critical tendencies of perfectionism.

The scores on the Enjoyment dimension were fairly evenly distributed among the subgroups of the participants, with little difference between the academic institution, degree types, academic years, genders, home languages and instrument groups. This supports the independent and intrinsic nature of enjoyment as a drive (Rae & McCambridge 2004), specifically in the context of tertiary music studies. However, the Cronbach Alpha of the Enjoyment items did not display adequate reliability for the current sample[26] – thereby questioning whether statements included in this dimension truly measured a similar construct. Considering the 8 items listed below, it is evident that, with the exception of the

[25] There were no significant differences between the scores on the motivation subscales.
[26] Refer back to Table 6, p. 78.

fourth, fifth and eighth statement, items are not primarily representing the enjoyment aspect of intrinsic motivation (Amabile et al. 1994: 237):

1. I prefer to figure things out for myself
2. No matter what the outcome of a project, I am satisfied if I feel I gained a new experience
3. I am more comfortable when I can set my own goals
4. It is important for me to be able to do what I most enjoy*
5. I enjoy doing work that is so absorbing that I forget about everything else*
6. It is important for me to have an outlet for self-expression
7. I want to find out how good I really can be at my work
8. What matters most to me is enjoying what I do*

Results involving the Intrinsic Motivation: Enjoyment dimension can therefore not be interpreted with confidence.

5.7 Confounding variables

After all the research questions were addressed, several additional questions regarding the demographic variables within the sample arose. It was decided to elaborate the study by comparing the perfectionistic tendencies, motivational orientations and anxiety levels according to a number confounding variables within the sample group. The following section will discuss significant results according to the variables:

5.7.1 Academic Institution: Parental dimensions of perfectionism

In comparing the students from the four universities, the group from the North-West University displayed significantly higher levels on both the Parental Expectations and Parental Criticism dimensions of perfectionism. In addressing my own assumption, as a graduate of this institution, the strong Afrikaans tradition within the university could be held accountable for this finding. The traditional Afrikaans family unit tends to be conservative and the parenting dynamic authoritative. Parents are often involved in prominent decisions regarding students' futures. However, my assumption of this result was challenged when the data was analysed further, and a different outcome unfolded.

5.7.2 Music degree: Parental dimensions of perfectionism and Performance Anxiety

The comparison between the two music degrees led to stark differences between them. Firstly, the BA (Music) students scored higher on both parental dimensions of perfectionism (Parental Criticism and Parental Expectations). This was interesting in the sense that the BA

degree has less demanding academic requirements, and therefore one would expect the expectations and criticism from parents to be more lenient. However, one should distinguish between actual and perceived expectations and criticism. Even so, one would assume that the students enrolled for the more demanding degree (BMus degree) would experience greater pressure from their parents. This led me to the supposition that other factors, beyond the academic requirements of the degree, are at play.

Equally surprisingly, the BA (Music) students displayed a significantly higher score on the items of Performance Anxiety compared to the BMus students. At first glance, this was unexpected, since there are greater performance demands on BMus students than BA (Music) students. A possible explanation for this result could be that the BA (Music) students specifically enrol for this degree, with the less strenuous performance requirements, given their lack of performance skills; however, in spite of this, they still experience significant fear of public performance. Another possibility could be that they specifically enrol for BA (Music) because of a prior awareness of their high levels of music performance anxiety. Further research into this phenomenon is necessary to clarify this finding between the two degrees more conclusively.

5.7.3 Home language: Parental dimensions of perfectionism

Further analysis of the home language groups provided some clarity on previous findings which showed significant differences between the parental dimensions of perfectionism. The students from the African language group scored significantly higher on the Parental Expectations and Parental Criticism dimensions than the other language groups. This finding suggests that cultural values play a significant role and contribute to the perception of parental involvement in tertiary studies.

Incidentally, the majority of the participants from the African language group are BA (Music) study at the North-West University. It is highly probable therefore; that the increased levels of Parental Criticism and Parental Expectations are possibly characteristic of a specific group of participants.

5.7.4 Main music instrument: Parental Expectations and Extrinsic Motivation: Compensation

The comparison between the different instrument groups revealed one important difference, specifically on the Parental Expectations dimension of perfectionism. The Voice students scored significantly higher than the Winds. The demographic variables of the students can possibly contribute to this, as the majority of the African language students indicated voice

as their main instrument. A second difference between the instrument groups include the Keyboard group who scored significantly higher than the Voice students on the Extrinsic Motivation: Compensation dimension, suggesting that keyboard players are much more focused on compensation and reward compared to voice students. This finding shed some light on the drive behind students' musical pursuit. However, very limited research exists on the perfectionistic and motivational tendencies of various instrumentalists, and I am therefore restricted in my own interpretation of this finding.[27]

5.7.5 Other variables

The academic year of study and gender variables delivered no differences on the measurements of perfectionism, motivation and anxiety. The absence of significant differences on the gender variable was rather surprising, since previous studies clearly indicated higher levels of performance anxiety among female participants (Kenny & Osborne 2006; Osborne & Kenny 2008; Ryan 2004).

5.8 Summary

The consideration of the various interactions between the perfectionistic tendencies, motivational orientations and anxiety levels, led me to the realization that perfectionism in university music students is far more complex than I initially anticipated. The resulting association between high personal standards and increased uncertainty about one's ability is perplexing. It is also interesting to note the significant role of parents in the academic experience of the student, even on a tertiary level. Other important findings that were revealed include differences in the perfectionistic tendencies of students from the various universities, music degrees, home language and music instrument groups. The instrument groups differed in their motivational orientations, and the students from the various music degrees displayed significant differences in the levels of performance anxiety. The study will conclude in Chapter 6 with a summary of the findings according to the research questions and hypotheses.

[27] Examples of relevant research include the study by Schmidt (2005).

CHAPTER 6
Summary and Conclusion

6.1 Introduction

The main aim of this study was to explore perfectionism and its relations to academic motivation and performance anxiety in an attempt to understand the demands, expectations and distress of undergraduate university music students. The study commenced with an overview of the literature involving background theories, key studies and relevant research on perfectionism, academic motivation and performance anxiety respectively. Thereafter I considered the methodological structure of the research and decided to examine the relationships between perfectionism, motivation and anxiety by means of a correlational approach, using the MPS (Frost et al. 1990), WPI (Amabile et al. 1994) and PAI-R (Rae & McCambridge 2004). The study integrated a post-positivist paradigm and followed a quantitative research approach. Participants were selected by means of purposive sampling and data was collected by means of questionnaires.

This chapter includes a final synopsis of the results. The findings will be summarised by answering the research questions – starting with the secondary research questions, followed by the main research question. In addition, the demographic variances within the sample will be considered according to the hypotheses as stated in Chapter 1.[28] The results are discussed according to significance levels such as strong, moderate and weak. Challenges and limitations of the research process, the possible contributions of the current study, and recommendations for future research are also considered.

6.2 Secondary research questions

How does perfectionism correlate with academic motivation in first, second and third year music students?

The study shows a significant association between perfectionism and academic motivation, on multiple levels and in varying degrees. Firstly, the dimension of perfectionism involved with the fear of failure (Concern over Mistakes) is strongly related to the acknowledgement and recognition from significant others (Extrinsic Motivation: Outward).

[28] See p. 14-15.

Furthermore, the results reveal several moderate correlations between perfectionism and extrinsic motivation. The Personal Standards aspect of perfectionism (setting high aspirations) displays a moderate to strong relationship with the external reward drive (External Motivation: Compensation). The Parental Criticism dimension of perfectionism, which refers to perceived parental disapproval, correlates moderately high with the drive to be acknowledged by significant others (Extrinsic Motivation: Outward). This outward drive of motivation furthermore correlates moderately with the perfectionistic tendency related to uncertainty about one's behaviour, Doubts about Actions.

The intrinsic motivation driven by challenge (Intrinsic Motivation: Challenge) correlates moderately with two different dimensions of perfectionism. The inherent impetus of challenge are related to both the systematic tendency of perfectionism (Organization subscale) and the personal strivings dimension of perfectionism (Personal Standards subscale).

Finally, three weak correlations are revealed between perfectionism and extrinsic motivation. The dimension of perfectionism concerned with perceived parental expectations (Parental Expectations) correlates moderately weakly with the acknowledgement and recognition from significant others (Extrinsic Motivation: Outward). The perfectionistic component involved in structure (Organization) relates weakly to external impetus provided by reimbursement (Extrinsic Motivation: Compensation). Lastly, the perfectionism rooted in personal goal setting (Personal Standards) correlates weakly with the motivation obtained from the acknowledgement by others (Extrinsic Motivation: Outward).

These results show that perfectionism is correlated with academic motivation, which suggests that South African undergraduate music students most likely employ perfectionism as part of the motivational strategies used to enhance academic performance. This suggestion is in line with previous studies supporting the adaptive and functional characteristics of perfectionism.[29]

To what extent is perfectionism related to performance anxiety in first, second and third year music students?

The study shows a weak correlation between perfectionism and music performance anxiety. This is surprising, as one would expect a stronger relation considering the large body of

[29] Examples of studies include Accordino et al. (2000), Chang (2000) and Stoeber & Otto (2006).

research suggesting a link between perfectionism and anxiety.[30] The correlation between perfectionism and music performance anxiety, albeit weak, exists on multiple levels, with anxiety being linked to aspects of uncertainty about behaviour (Doubts about Actions), perceived parental disapproval (Parental Criticism) and fear of failure (Concern over Mistakes). Taking existing evidence into account, the relation between perfectionism and music performance anxiety is clearly anticipated.[31] A second unexpected finding is the occurrence of parental factors in the relation to performance anxiety, especially at a tertiary level. An initial assumption is that that university students will, with increasing independence, be able to distance themselves from perceived parental pressure. The correlation between Parental Criticism and performance anxiety is in clear conflict with this assumption and is suggestive of the enduring influence of childhood upbringing.[32]

What is the relation between academic motivation and performance anxiety in first, second and third year music students?

Overall, academic motivation correlates moderately with music performance anxiety in the Extrinsic Motivation: Outward subscale of the Work Preference Inventory. The drive to be recognized by others (Extrinsic Motivation: Outward) are therefore contributing to higher levels of music performance anxiety. This relation is convincing, specifically within the highly competitive and audience pleasing context of music performance.

What are the relations between the multidimensional perfectionistic tendencies in first, second and third year music students?

The dimensions of perfectionism relate with one another on numerous levels. The strongest correlation is evident between the parental dimensions of perfectionism, namely Parental Expectations and Parental Criticism. This comes as no surprise as both dimensions focus on perceived parental communication. The Concern over Mistakes dimension displays strong moderate correlations with Personal Standards, Parental Criticism and Doubts about Actions respectively. The Personal Standards and Organization dimensions are related to one another to a moderate degree. Weak correlations within perfectionism include the relations between Parental Criticism and Doubts about Actions; Concern over Mistakes and Parental Expectations; and Personal Standards and Doubts about Actions.

[30] Research include Essau et al. (2008), Hewitt & Dyck (1986), McQuade (2008) and O'Connor & O'Connor (2003).
[31] Refer to Kenny (2006), Kenny et al. (2004) and Kenny & Osborne (2006).
[32] Refer to related research by Hamachek (1978) on the emotional environment during upbringing.

The correlations between the various dimensions confirm the multidimensional nature of perfectionism, with Concern over Mistakes gaining prominence as it correlates with all the other dimensions (with the exception of the Organization dimension[33]). This confirms the traditional view of perfectionism as 'the negative reaction to mistakes', even more so in a performing art where written music should be conveyed as flawlessly as possible.[34]

What are the relations between the motivational drives in the first, second and third year music students?

The relations within motivation are threefold. Intrinsic Motivation: Challenge correlates with all three of the other motivational orientations – displaying a moderate relation to Intrinsic Motivation: Enjoyment; a weak correlation with Extrinsic Motivation: Compensation; and a weak inverse relation with Extrinsic Motivation: Outward.

Intrinsic Motivation: Challenge came across as the principal motivational orientation of music students,[35] as it correlated with all the other orientations of the WPS (Amabile et al. 1994). It is interesting to note that the music participants are, despite the external factors involved in the performing arts, still predominantly intrinsically driven. But then again, considering the many hours of preparation and practicing required, it is of no surprise that Intrinsic Motivation: Challenge appeared as the central drive.

6.3 Main research question

How does perfectionism relate to academic motivation and performance anxiety in first, second and third year music students?

The study reveals several important correlations between the perfectionistic tendencies, motivational orientations and performance anxiety levels in first, second and third year music students. The results clearly suggest several positive relations between perfectionism, academic motivation and performance anxiety on multiple levels. These complex associations are intricately embedded in undergraduate music students' academic experience, and confirms that neither perfectionism, academic motivation, nor performance anxiety can be considered in isolation.

[33] The Organization dimension was later omitted from the MPS (Frost et al. 1990).
[34] The prevailing music genre was Western Classical music, and thus the assumption of written notes.
[35] Intrinsic Motivation: Enjoyment scored the highest of all the motivational subscales, see Chapter 5, section 5.6.2, p. 132.

One relationship involving perfectionism, motivation and performance anxiety simultaneously were revealed by the study. [36] Parental Criticism correlates with both Extrinsic Motivation: Outward and Performance Anxiety, and furthermore, Extrinsic Motivation: Outward and Performance Anxiety correlated with one another. The assumption can therefore be made that Parental Criticism, Extrinsic Motivation: Outward, and Performance Anxiety are interacting factors in the academic experience of the university music student (Figure 29).

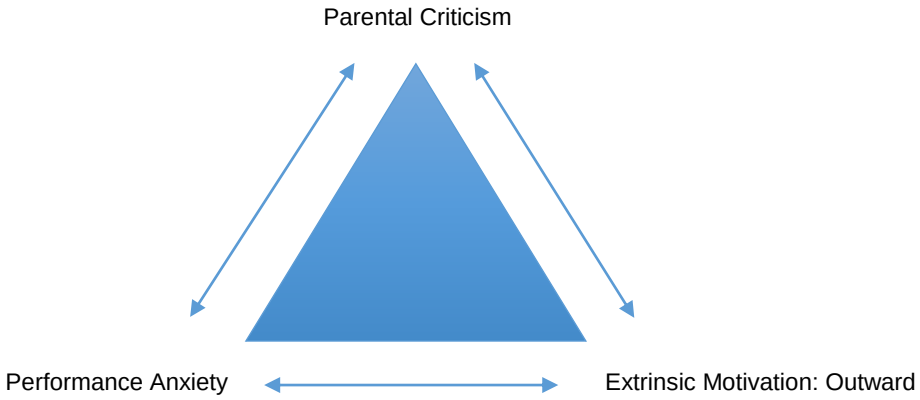

Figure 29: Correlation between Parental Criticism, Extrinsic Motivation: Outward and Performance Anxiety

6.4 Additional findings: Confounding variables

The perfectionistic traits, motivational tendencies and anxiety levels were further tested according to the following null hypotheses:

$H0_1$: There are no significant differences between the music students from the various universities on perfectionism, academic motivation and performance anxiety.

The participants from the North-West University displayed significant differences on two of the dimensions of perfectionism. Firstly, they scored significantly higher on the Parental Expectations subscale than the students from Stellenbosch University. Secondly, they displayed significant higher levels on the Parental Criticism subscale in comparison to the participants from both Stellenbosch University and the University of the Free State. The null hypothesis can therefore be rejected, and we can assume that there certainly are significant

[36] This is assumption is made based on favourable results produced by the simple regression analysis. However, to confirm the statistical validity of this relation, multiple regression should be conducted on a larger sample.

differences between the music students from the various universities regarding perfectionism.

$H0_2$: There are no significant differences between the music students from the different academic years on perfectionism, academic motivation and performance anxiety.

The analysis revealed no differences between the year groups on any of the dimensions of perfectionism, motivation or performance anxiety. The results led to the failure to reject the null hypothesis, and we are assuming that there are no significant differences between the music students from the different academic years regarding perfectionism, academic motivation and performance anxiety.

$H0_3$: There are no significant differences between the BA (Music) and BMus students on perfectionism, academic motivation and performance anxiety.

The BA (Music) students scored significantly higher than the BMus participants on both the parental dimensions of perfectionism, namely Parental Expectations and Parental Criticism, as well as the Performance Anxiety dimension. The null hypothesis can in this case be rejected, and we can accept that there are indeed significant differences between the BA (Music) and BMus students regarding perfectionism and performance anxiety.

$H0_4$: There are no significant differences between the gender groups on perfectionism, academic motivation and performance anxiety.

The statistics revealed no significant different results between the female and male students, therefore leading to the failure to reject the null hypothesis. The assumption is thus that there are no significant differences between the gender groups regarding perfectionism, academic motivation and performance anxiety.

$H0_5$: There are no significant differences between the language groups on perfectionism, academic motivation and performance anxiety.

The African language students revealed significantly higher scores on both the parental dimensions of perfectionism. Their scores were significantly higher on the Parental Expectations subscale than the two other language groups, Afrikaans and English, and they furthermore indicated higher levels of Parental Criticism compared to English students. This

lead to the rejection of the null hypothesis, and the conclusion that there *are* significant differences between the language groups regarding perfectionism.

$H0_6$: There are no significant differences between the instrument groups on perfectionism, academic motivation, and performance anxiety

The instrument groups displayed significant differences on dimensions of perfectionism and motivation. Firstly, the voice students presented significantly higher levels of Parental Expectations than the wind instrumentalists. Furthermore, the keyboard participants scored higher on the Extrinsic Motivation: Compensation subscale compared to the voice participants. The null hypothesis can thus be rejected and the assumption can be made that there are significant differences between the instrument groups regarding perfectionism and academic motivation.

In summary, the analysis of the confounding variables revealed several interesting results, however, the statistical validity thereof is limited by the small sample subgroups. These findings can nevertheless encourage future research. The differences between the BA (Music) and BMus students on the parental aspects of perfectionism and performance anxiety were unexpected. Similarly, the increased levels of perceived parental involvement among the African language students suggest a cultural nuance in perfectionism which has rarely been addressed or considered in previous research.[37] Lastly, with female participants representing almost two thirds of the sample,[38] it was surprising to find no differences between the genders in the levels of music performance anxiety. This is in contrast with several studies suggesting increased anxiety levels in female musicians.[39]

6.5 Challenges and limitations of the study

As the research process unfolded, a number of limitations came to light. These include the subjectivity of participants, the size and compilation of the sample and various methodological aspects. By addressing these limitations one can improve the quality of future research.

The nature of the study essentially lends itself to *subjective bias*, since participants were required to report on their academic behaviour by means of a self-rating scale. It is questionable whether the majority of music students hold a realistic the view of their own

[37] The only two other studies I am aware of include research by Essau et al. (2008) and Gilman et al. (2005).
[38] See Figure 8, p. 75.
[39] Refer to Kenny (2006; 2011) and Kenny & Osborne (2006).

abilities, especially considering the competitive and demanding sphere of the performing arts.

At first, the *sample size* didn't come across as a limiting factor. However, in a study involving multiple relations, the ideal method for analysis is multiple regression, which can explore the relation between three or more variables. Since multiple regression should be conducted on larger samples, we were limited to the use of simple regression, and therefore alter the approach by only considering the relation between two variables at a time. Furthermore, a larger sample would have produced more responses on the questionnaire items, thereby increasing both the quality and statistical reliability of the data.

The *academic background* of the participants can in a sense also be seen as restrictive. Although multiple universities were approached for this study, the music departments who agreed to participate, originated from a traditional Afrikaans background[40] as reflected by the demographics of the participants.[41] The sample was therefore not demographically representative of our multicultural country. Perhaps a more accurate presentation of South African music students will be obtained by involving a greater variety of universities from across the country. In addition, it appeared that Western Classical music was the main genre of education within the universities, with the minority of students specialising in Jazz or African music. It is debatable whether the small number of participants practicing a genre other than Western Classical music, influenced the results of the study. Nonetheless, a distinction between the genres should have been made to accommodate for possible differences in academic approaches.[42]

There is a definite need for *longitudinal research* investigating the development of perfectionism, and in this case, parental influences on academic behaviour. Although the current study did not perceive any variances between the academic years in terms of perfectionism, it would be interesting to determine whether perfectionism has increased or decreased since high school – a period generally characterised by higher parental involvement.

Several *methodological limitations* were identified during the course of the study. The quantitative research design was limiting in the sense that it merely revealed significant relations but did not provide clarity on the underlying dynamics. A mixed method design,

[40] It should be noted that all the participating universities, despite their Afrikaans origins, have already evolved tremendously in terms of multilingual and multicultural education.
[41] Refer back to Figure 9, p. 76.
[42] Refer to studies by Kemp (1981; 1996) and May (2003).

therefore including qualitative research components, would have been able to address this problem. Another shortcoming includes the choice of research instruments. Firstly, the MPS was useful as it considers perfectionism from multiple angles. However, there are some discrepancies between the six dimensions. For example, the parental dimensions, Parental Criticism and Parental Expectations, differ from the rest of the dimensions as they specifically focus on the individual's perception of other people's behaviour (parents). In contrast, the Concern over Mistakes, Personal Standards, Doubts about Actions and Organization dimensions emphasise the individual's personal behaviour. Furthermore, it should be noted that the parental dimensions represent the perceived, and not necessarily the actual, behaviour of the parents. Perhaps these additional variables within the MPS provide enough reason to reconsider the use of this measurement instrument in future studies.[43] The Intrinsic Motivation: Enjoyment dimension of the WPI delivered unsatisfactory reliability scores, which inevitably questions the interpretation of results involving this dimension.[44] For this reason, the relevancy of the Enjoyment subscale within a South African music context should be reassessed.

6.6 Possible contributions of the study

This study is the first of its kind to probe the phenomena perfectionism, academic motivation and music performance anxiety in a South African context. It provides valuable insight into the perfectionistic tendencies, motivational orientations and performance anxiety included in the experiences of undergraduate music students in South Africa. The research presents a unique perspective into this population group which results in a greater understanding of the subtleties involved in the academic experiences of music students. A number of important aspects emerged from the results. Perhaps the most prominent contribution of this study, is the indication of parental influence in tertiary music studies, and more specifically, the relation between perceived parental criticism, external motivational factors and music performance anxiety. As one of the few studies following a multi-cultural approach to perfectionism,[37] the research not only addressed an important need, but also suggested possible cultural dynamics involved in the parental dimensions of perfectionism.

An awareness of the perfectionistic traits and its association and effect on academic motivation and music performance anxiety, would benefit tertiary institutions and staff and enable them to assist in improving the wellbeing of the students. Institutions could implement measures to address these issues which would result in decreased anxiety levels, increased well-being, and possibly, a better academic throughput.

[43] The Perfectionism Inventory (Hill et al. 2004) is a possible alternative.
[44] Refer back to Table 6, p. 78.

6.7 Recommendations for future research

The interpretation of the various relations between perfectionism, motivation, and anxiety unquestionably deserves further investigation. The current study can be extended by employing a larger sample size, making use of a multi-method research design, and taking different musical contexts into account. The current sample delivered interesting differences between the demographic variables which can possibly lead to significant discoveries in future research.

The influence of parents in tertiary music studies is an important aspect that emerged from the results with Parental Criticism showing relations to both Extrinsic Motivation: Outward and Performance Anxiety, and Parental Expectations correlating with Extrinsic Motivation: Outward. Both parental aspects of perfectionism, the Parental Expectations and Parental Criticism dimensions, furthermore displayed significant differences across several of the variables within the sample – including the academic institution, the degree type, home language and main music instrument. Additional research, specifically of a qualitative nature, may reveal various psychological, cultural and environmental factors contributing to perceived parental influences related to perfectionism.

Furthermore, the focus of the current study was limited to the perceived role of parents in the experience of perfectionism. Although several dimensions (such as the Concern over Mistakes and Extrinsic Motivation: Outward) did recognize the influence of significant others, the specific role players were not identified. It would therefore be interesting to explore how music students perceive the role of other individuals, such as peers or educators, and whether there are more significant interpersonal influences, apart from parents, on their academic approach.

The current body of research on music performance anxiety can be expanded by exploring the anxiety levels for the different degree students. It was surprising to find that the BA (Music) students experienced significant higher levels of performance anxiety levels than the BMus students, as the contrary was expected due to the high performance requirements for the BMus degree. A qualitative study exploring this aspect may contribute to a greater understanding of performance anxiety in music students.

Lastly, the higher levels of compensatory driven external motivation found in the keyboard players can inspire research to explore the different motivational drives and psychological mechanisms underlying the choice of main instrument.

6.8 Conclusion

Despite the multitude of research that has been conducted on perfectionism over the past few decades, I am not convinced that we have fully grasped the complexity of this concept as yet. This is supported by the multiple relations between perfectionism, academic motivation and performance anxiety within the South African tertiary context, as well as the differences between the various demographic variables within the sample of undergraduate music students. However, based on what is currently known about perfectionism, we can strive to improve our experience as music students by employing the adaptive aspects of perfectionism in our academic behaviour.

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APPENDICES

APPENDIX 1: Questionnaire

APPENDIX 2: Informed consent form: Student and music department

APPENDIX 3: Letters of permission: Approval from academic institutions

APPENDIX 1

Questionnaire

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

DEPARTMENT OF MUSIC

Faculty of Humanities

THE AIM OF THIS QUESTIONNAIRE IS TO INVESTIGATE THE ROLE OF PERFECTIONISM IN YOUR MUSIC STUDIES

Instructions for completing the questionnaire:

- The questionnaire is divided into four parts. It is important that you answer all the questions. The information will be used for research purposes only.
- When answering a question please **do not be idealistic**. Answer according to **HOW YOU FEEL NOW**, NOT according to how you think you ought to feel or how you would like things to be.
- Circle your choice or fill in as prompted.
- Please answer truthfully. **Your anonymity is assured.**

1. Which University do you attend?

University of Pretoria	1	North-West University	2
University of the Free State	3	Stellenbosch University	4
University of Cape Town	5	Other (Specify)	6

2. Which course do you follow at the University?

BMus	1	BA(Music)	2

3. Which year of music studies are you currently enrolled for?

First year	1
Second year	2
Third year	3

For office use
A1:
A2:
A3:

4. Please indicate your gender.

Male	1	Female	2

A4:

5. Please indicate your home language.

English	1	Afrikaans	2
Sesotho	3	Other (Please specify):	4

6. Please indicate your two main instruments.

1.	
2.	

7. Are you satisfied with your overall achievement for your music studies thus far?

Yes	1	No	1

Section B
Multidimensional Perfectionism Scale

- This questionnaire consists of 35 items and is formulated to measure the various dimensions of perfectionism.
- Read the questions carefully.
- Rate each statement in terms of “strongly disagree” to “strongly agree”. **Circle** your choice

	STRONGLY DISAGREE				STRONGLY AGREE	For office use	
1. My parents set very high standards for me	1	2	3	4	5	B1. c1	
2. Organization is very important to me	1	2	3	4	5	B1. f1	
3. As a child, I was punished for doing things less than perfectly	1	2	3	4	5	B1. d1	
4. If I do not set the highest standards for myself, I am likely to end up a second-rate person	1	2	3	4	5	B1. b1	
5. My parents never tried to understand my mistakes	1	2	3	4	5	B1. d2	
6. It is important to me that I be thoroughly competent in everything I do.	1	2	3	4	5	B1. b2	
7. I am a neat person	1	2	3	4	5	B1. f2	
8. I try to be an organized person	1	2	3	4	5	B1. f3	
9. If I fail at work/school, I am a failure as a person	1	2	3	4	5	B1. a1	
10. I should be upset if I make a mistake	1	2	3	4	5	B1. a2	
11. My parents wanted me to be the best at everything	1	2	3	4	5	B1. c2	
12. I set higher goals than most people	1	2	3	4	5	B1. b3	
13. If someone does a task at work/school better than me, I feel as though I failed at the whole task	1	2	3	4	5	B1. a3	

14. If I fail partly, it is as bad as being a complete failure	1	2	3	4	5		B1. a4	
15. Only outstanding performance is good enough in my family	1	2	3	4	5		B1. c3	
16. I am very good at focusing my efforts on attaining a goal	1	2	3	4	5		B1. b4	
17. Even when I do something very carefully, I often feel that it is not quite right	1	2	3	4	5		B1. e1	
18. I hate being less than the best at things	1	2	3	4	5		B1. a5	
19. I have extremely high goals	1	2	3	4	5		B1. b5	
20. My parents have expected excellence from me	1	2	3	4	5		B1. c4	
21. People will probably think less of me if I make a mistake	1	2	3	4	5		B1. a6	
22. I never felt as though I could meet my parents' expectations	1	2	3	4	5		B1. d3	
23. If I do not do as well as other people, it means I am an inferior human being	1	2	3	4	5		B1. a7	
24. Other people seem to accept lower standards from themselves than I do	1	2	3	4	5		B1. b6	
25. If I do not do well all the time, people will not respect me	1	2	3	4	5		B1. a8	
26. My parents have always had higher expectations for my future than I have	1	2	3	4	5		B1. c5	
27. I try to be a neat person	1	2	3	4	5		B1. f4	
28. I usually have doubts about the simple everyday things I do	1	2	3	4	5		B1. e2	
29. Neatness is very important to me	1	2	3	4	5		B1. f5	
30. I expect higher performance in my daily tasks than most people	1	2	3	4	5		B1. b7	
31. I am an organized person	1	2	3	4	5		B1. f6	
32. I tend to get behind in my work because I repeat things over and over	1	2	3	4	5		B1. e3	

33. It takes me a long time to do something "right"	1	2	3	4	5		B1. e4	
34. The fewer mistakes I make, the more people will like me	1	2	3	4	5		B1. a9	
35. I never felt as though I could meet my parents' standards	1	2	3	4	5		B1. d4	

Section C
Work Preference Inventory

- This questionnaire consists of 30 statements and is formulated to assess your general intrinsic and extrinsic motivational attitude toward your studies.
- Read the questions carefully.
- Rate each statement in terms of “never true of me” to “always true of me”. **Circle** your choice.

	NEVER TRUE OF ME			ALWAYS TRUE OF ME	For office use	
1. I am not that concerned about what other people think of my work	1	2	3	4	C1.b1r. e1r	
2. I prefer having someone set clear goals for me in my work	1	2	3	4	C1.b2. e2	
3. The more difficult the problem, the more I enjoy trying to solve it	1	2	3	4	C1.a1. d1	
4. I am keenly aware of the goals I have for getting good grades	1	2	3	4	C1.b3. f1	
5. I want my work to provide me with opportunities for increasing my knowledge and skills	1	2	3	4	C1.a2. d2	
6. To me, success means doing better than other people	1	2	3	4	C1.b4. e3	
7. I prefer to figure things out for myself	1	2	3	4	C1.a3. c1	
8. No matter what the outcome of a project, I am satisfied if I feel I gained a new experience	1	2	3	4	C1.a4. c2	
9. I enjoy only relatively simple, straightforward tasks	1	2	3	4	C1.a5r. d3r	
10. I am keenly aware of the academic goals I have for myself	1	2	3	4	C1.b5. f2	
11. Curiosity is the driving force behind much of what I do	1	2	3	4	C1.a6. d4	
12. I'm less concerned with what work I do than what I get for it	1	2	3	4	C1.b6. e4	
13. I enjoy tackling problems that are completely new to me	1	2	3	4	C1.a7. d5	

14. I prefer work I know I can do well over work that stretches my abilities	1	2	3	4	C1.a8r d6r	
15. I'm concerned about how other people are going to react to my ideas	1	2	3	4	C1.b7. e5	
16. I seldom think about grades and awards	1	2	3	4	C1.b8r f3r	
17. I'm more comfortable when I can set my own goals	1	2	3	4	C1.a9. c3	
18. I believe that there is no point in doing a good job if nobody else knows about it	1	2	3	4	C1.b9. e6	
19. I am strongly motivated by the grades I can earn	1	2	3	4	C1. b10.f4	
20. It is important for me to be able to do what I most enjoy	1	2	3	4	C1. a10.c4	
21. I prefer working on projects with clearly specified procedures	1	2	3	4	C1. b11.e7	
22. As long as I can do what I enjoy, I'm not that concerned about exactly what grades or awards I can earn	1	2	3	4	C1.b12 r.f5r	
23. I enjoy doing work that is so absorbing that I forget about everything else	1	2	3	4	C1. a11.c5	
24. I am strongly motivated by the recognition I can earn from other people	1	2	3	4	C1. b12.e8	
25. I have to feel that I'm earning something for what I do	1	2	3	4	C1. b13.e9	
26. I enjoy trying to solve complex problems	1	2	3	4	C1. a12.d7	

27. It is important for me to have an outlet for self-expression	1	2	3	4		C1. a13.c6	
28. I want to find out how good I really can be at my work	1	2	3	4		C1. a14.c7	
29. I want other people to find out how good I really can be at my work	1	2	3	4		C1. b14. e10	
30. What matters most to me is enjoying what I do	1	2	3	4		C1. a15.c8	

Section D
Performance Anxiety Inventory-Revised

- This questionnaire consists of 11 items and is formulated to measure anxiety levels during a practical music exam.
- Read the questions carefully.
- Rate each statement in terms of “never” to “always”. **Circle** your choice.

	NEVER					ALWAYS	For office use	
1. I feel confident and relaxed while performing before an examiner	1	2	3	4	5	6	D1.1r	
2. If I make a mistake, I usually panic	1	2	3	4	5	6	D1.2	
3. During an exam I find myself thinking about whether I’ll get through it	1	2	3	4	5	6	D1.3	
4. Thoughts of doing poorly interfere with my performance	1	2	3	4	5	6	D1.4	
5. I feel very jittery when doing an important exam	1	2	3	4	5	6	D1.5	
6. Even when I’m well prepared for an exam, I feel very anxious about it	1	2	3	4	5	6	D1.6	
7. I wish exams did not bother me so much	1	2	3	4	5	6	D1.7	
8. During exams I am so tense that I feel physically ill	1	2	3	4	5	6	D1.8	
9. If I were to take an important examination, I would worry a great deal before taking it	1	2	3	4	5	6	D1.9	
10. I feel my heart beating very fast during exams	1	2	3	4	5	6	D1.10	
11. As soon as an exam is over, I try to stop worrying about it, but I just can’t	1	2	3	4	5	6	D1.11	

APPENDIX 2

INFORMED CONSENT FORM

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

UNIVERSITY OF PRETORIA
Pretoria 0002 Republic of South Africa
Tel 012 420 4111; http://www.up.ac.za

Faculty of Humanities

DEPARTMENT OF MUSIC
Tel 012 420 3747 Fax 012 420 2248

Dear Music student

I, Madaleen Botha, would like you to take part in a research project for a Master's degree in Musicology at the University of Pretoria. The study is entitled *Perfectionism in South African university music students: Correlations with academic motivation and performance anxiety.* The aim of the study is to examine the relation of perfectionism with academic motivation and performance anxiety in first-, second-, and third year music students. The study aims to also compare first-, second-, and third year music students in terms of the perfectionistic trait and investigate the correlation between the negative and positive aspects within perfectionism.

The first part of the study requires completing a questionnaire. It should not take more than 20 minutes of your time. The questionnaire includes four sections: section A asks basic information, section B includes questions measuring the various dimensions of perfectionism, a measure for intrinsic and extrinsic academic motivation is included in section C, and section D assesses the level of music performance anxiety.

The second part of the study includes a short semi-structured interview. I will need approximately 10 students who will be selected voluntarily to participate in an individual face-to-face interview consisting of open-ended questions.

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 academic research 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. No financial benefits will be involved.

Your participation in this research will be greatly appreciated and will contribute to a deeper understanding of music students and perfectionism. Should you agree to take part in the study, please complete the informed consent form attached.

Many thanks

Madaleen Botha

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

INFORMED CONSENT FORM

I hereby agree to participate in the first part of the MMus study by Madaleen Botha, consisting of a questionnaire entitled *Perfectionism in South African university music students: Correlations with academic motivation and performance anxiety.*

I understand that I am free to withdraw should I so choose and understand that there is no reward or other incentive to participate in the study. I have also been informed that my anonymity will be ensured.

_____ Signature of participant

_____ Date

UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

UNIVERSITY OF PRETORIA
Pretoria 0002 Republic of South Africa
Tel 012 420 4111; http://www.up.ac.za

28 February 2011

Dear Professor Devroop: Head of Music, North-West University,

In fulfillment for the Master's degree in Musicology at the University of Pretoria, I am proposing a study entitled *Perfectionism in South African university music students: Correlations with academic motivation and performance anxiety.* The aim of the study is to examine the relation of perfectionism with academic motivation and performance anxiety in first- and second-year music students. The study aims to also compare first- and second-year music students in terms of the perfectionistic trait and investigate the correlation between the negative and positive aspects within perfectionism.

The study requires the participation of first- and second-year music students in the completion of a five section-questionnaire. Section A asks basic information, section B includes questions measuring the various dimensions of perfectionism, a measure for intrinsic and extrinsic motivation is included in section C, and section D assesses the level of performance anxiety. The second part of the study consists of a semi-structured interview. A number of 12 students will be selected to participate in an individual face-to-face interview consisting of open-ended questions. The aim of the interview is to elaborate on the questionnaire used in the first part of the study.

I am hereby requesting permission to involve the first- and second-year music students, from both the BAMus and BMus courses, from the North-West University in the study. All students' participation is voluntary and they are free to withdraw at any stage. Their 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. No financial benefits will be involved.

Should there be any uncertainties regarding the aim or procedure of the study, please do not hesitate to contact me.

Many thanks

Madaleen Botha

madaleen7@gmail.com; Contact number: 083 536 3592

Supervisor: Dr Clorinda Panebianco-Warrens

Clorinda.Panebianco-Warrens@up.ac.za

APPENDIX 3

Letters of permission: Approval from academic institutions

UNIVERSITEIT VAN
UNIVERSITY OF
YUNIBESITHI YA

Faculty c
Research Ethic

18 July 2011

Dear Prof Hinch,

Project:	**Perfectionism in South African university music correlations with academic motivation and perfc anxiety**
Researcher:	**M Botha**
Supervisor:	**Dr C Panebianco-Warrens**
Department:	**Music**
Reference:	**26083303**

I have pleasure in informing you that the Registrar and Student Dean have **approval** for the above study to be conducted at the University of Pretoria. Pl this approval is based on the assumption that the research will be carried out laid out in the proposal. Should your actual research depart significantly from research, it will be necessary to apply for a new research approval and ethical

The Committee requests you to convey this approval to the researcher.

We wish you success with the project.

Sincerely

Prof John Sharp
Chair: Research Ethics Committee
Faculty of Humanities
UNIVERSITY OF PRETORIA
e-mail: john.sharp@up.ac.za

Research Ethics Committee Members: Dr L Blokland; Prof M-H Coetzee; Dr JEH Grobler; Prof KL Harris; Ms H Klopp Panebianco-Warrens; Prof J Sharp (Chair); Prof GM Spies; Prof E Taljard ; Dr J van Dyk; Dr FG Wolmarans, Dr P Wood

NORTH-WEST UNIVERSITY
YUNIBESITI YA BOKONE-BOPHIRIMA
NOORDWES-UNIVERSITEIT
POTCHEFSTROOMKAMPUS

School of Music and Conservatory
Private Bag X6001, Potchefstroom
Suid-Afrika, 2520
(018) 299 1816

10 February 2011

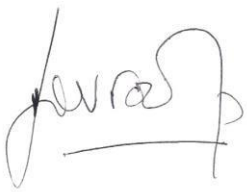
RE: Permission to use School of Music Students for Research Study.

Dear Madaleen,

This letter serves as formal approval for you to use our BMus students in your research study. It is my understanding that our students will serve as participants in your survey and that they are in no danger of physical or psychological harm. Please note that although permission is granted to students to participate in the research study, they do have the option to decline participation or withdraw at anytime.

We will do our best to accommodate you as your proceed with your research.

Sincerely,



Prof Karendra Devroop
Director: School of Music and Conservatory
North West University (018) 299 1816 karendra.devroop@nwu.ac.za

Date: Mon, 12 Sep 2011 16:43:48 +0200
From: "Martina Viljoen" <ViljoenM@ufs.ac.za>
To: "Madaleen Botha" <madaleen7@gmail.com>, "Rudi Buys" <BuysBR@ufs.ac.za>,
"Frelet De Villiers" <DeVilliersAMF@ufs.ac.za>
Subject: Re: MMus study from University of Pretoria: Permission to
involve UFS students

--=__PartE6C9CBB4.0__=
Content-Type: text/plain; charset=US-ASCII
Content-Transfer-Encoding: quoted-printable

Hartlike dank vir alle moeite wat reeds in die proses gedoen is - veral
ook=
aan Rudi Buys! En baie sterkte aan die kandidaat!
=20
Met vriendelike groete
=20
Martina Viljoen
=20
Prof Martina Viljoen
Programme Director=20
Department of Music
University of the Free State
P.O. Box 339
Bloemfontein
9300
South Africa
=20
Tel. +27-(0)51-4012493
Fax. +27-(0)51-4445830
Cell. +27-(0)82-5675695

>>> Rudi Buys 2011/09/12 12:32 PM >>>

Hi Madaleen=20

So ontvang en geregistreer. Baie sterkte met die studie. Beste wense, Rudi

B Rudi Buys=20
Dean: Student Affairs/Dekaan: Studentesake/Hlooho: Ditaba tsa baithuti=20

MENTORING STUDENT EXCELLENCE/BEGELEIDING VAN STUDENTE-
UITNEMENDHEID/TATAISO=
YA BAITHUTI BOIKEMELONG BA BONA!=20

t. +27 (0) 51 401 2852=20
f. +27 (0) 51 444 6718=20
c. +27 (0) 82 448 5984=20
e. studentsdean@ufs.ac.za/buysbr@ufs.ac.za=20
s. oryxbuys=20

>>> Madaleen Botha <madaleen7@gmail.com> 9/11/2011 7:52 PM >>>

Beste Prof Buys,=20

Vind asseblief aangeheg die volgende soos versoek:=20

1. Etiese verslag van die Universiteit van Pretoria=20

2. Die Navorsingsvoorstel (voorlopige skedule is hier ingesluit)=20

3. Toestemmingsbrief (student)=20

4. Vraelys (Afdeling A-D)=20

5. Onderhoudsvrae=20

Laat weet gerus indien daar nog dokumentasie nodig is. Ek stuur hierdie epos graag ook aan Proff Viljoen (Martina) en De Villiers, van die Departement Musiek.

Baie dankie.

Vriendelike groete

On Sat, Sep 10, 2011 at 11:08 AM, Rudi Buys=20
<Buysbr@ufs.ac.za>=20

wrote:

Dear Madaleen=20

We've provisionally registered your study with our research desk, pending receipt of your research protocol and schedule, which we require in the assessment and approval thereof. Would you please kindly forward the said documents, which is securely recorded and stored.=20

The only further requirement is the sharing of results of the study.=20

Kind regards, Rudi=20

B Rudi Buys
Dean: Student Affairs/Dekaan: Studentesake/Hlooho: Ditaba tsa baithuti

MENTORING STUDENT EXCELLENCE/BEGELEIDING VAN STUDENTE-UITNEMENDHEID/TATAISO=
 YA BAITHUTI BOIKEMELONG BA BONA!

UNIVERSITEIT • STELLENBOSCH • UNIVERSITY
jou kennisvennoot • your knowledge partner

21 September 2011

Me M Botha
Posbus 2310
Faerie Glen
0043

madaleen7@gmail.com

Geagte me Botha

INSTITUSIONELE TOESTEMMING VIR NAVORSING:VERW: 693/2011
("Perfectionism in South African university music students: Correlation with academic motivation and performance anxiety")

Hiermee word toestemming verleen dat u met die navorsing oor bogenoemde onderwerp soos uiteengesit in u navorsingsvoorstel, onder BA(Musiek) en BMus studente aan die Stellenbosch Universiteit mag voortgaan in oorleg met Prof W Lüdemann, voorsitter van Departement Musiek.

Die navorsing is onderhewig aan die vereistes en bepalings soos uiteengesit deur die Universiteit van Pretoria se Etiekkomitee.

Vriendelike groete

PROF JAN BOTHA
SENIOR DIREKTEUR: INSTITUSIONELE NAVORSING EN BEPLANNING

Afskrif: Prof Lüdemann: Dept Musiek voorsittter

/E:toestemming MBotha.doc

Afdeling Institusionele Navorsing en Beplanning • Institutional Research and Planning Division
Privaatsak/Private Bag X1 • Stellenbosch • 7602 • Suid-Afrika/South Africa Tel. +27 21 808 3967 • Faks/Fax +27 21 808 4533

From: "Wim Viljoen" <Wim.Viljoen@up.ac.za>
To: "Madaleen Botha" <madaleen7@gmail.com>
Cc: "Clorinda Panebianco-Warrens" <drclorinda@mweb.co.za>
Subject: Re: Data versameling - MMus
References:
 <CAHXeYeinX+4U+h2QqjE_Q8Ow__zqwA1nmYa=E93FwkmeY7wwyw@mail.gmail.com>
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X-Scan-Signature: 49cd9a705f9c87ace3ee905c0b2f4907

This is a MIME message. If you are reading this text, you may want to
consider changing to a mail reader or gateway that understands how to
properly handle MIME multipart messages.

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Content-Transfer-Encoding: quoted-printable

Beste Madaleen
Dit is natuurlik is dit moontlik. Jy moet net self na die voorderagklas =
kom en dan kan ons 'n afkondiging doen sodat jy dit na die klas kan doen. =
jy kan ook plakkate opsit.
=20
Verder moet jy met elke dosent persoonlik reel en toestemming vra om 5 =
min van hulle tyd te neem (dis 3 weke voor die eksamen).
Beste wense
Prof Viljoen

>>> Madaleen Botha <madaleen7@gmail.com> 2011/10/13 10:21 AM >>>
Beste Prof Viljoen,

Ek is nou op daardie stadium van my studies waar ek kyk om data te =
versamel. Dit behels die invul van 'n 20min vraelys deur die eerste-, =
tweede-, en derdejaars (beide BA en BMus studente). Ek het gewonder of =
volgende week (17-21 Okt) kan werk hiervoor? Ek het reeds data versamel by
=
Kovsies, Pukke en Maties en het gevind dat een van die volgende twee =
benaderinge die beste werk:

1. Om die studente tydens 'n studentebyeenkoms (bv Voordragklas) te vra om
=
na die tyd agter te bly sodat hulle die vraelys daar kan voltooi.
2. Om 5min van elk van die betrokke jaargroep se klas (bv MSG 320) af te =
staan om die studie bekend te stel (en pamflette uit te deel) en die =
studente aan te moedig om my by 'n spesifieke lokaal te ontmoet om die =
vraelys op hul eie tyd in te vul.

Laat weet wanneer en watter metode u dink die beste gaan werk.

Baie dankie!

Vriendelike groete,

Madaleen Botha