

**SELF-DIFFERENTIATION, PRIDE AND COMMITMENT
OF UNIVERSITY STUDENTS**

by

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“Self-initiated learning, once begun, develops its own momentum”

Ray Hartjen

*“If you want to get somewhere you have to know where you want to go
and how to get there. Then never, never, never give up”*

Norman Vincent Peale

*My thesis is dedicated to
my wife Germa
who supported me wholeheartedly
throughout my entire study.*

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All the honour and glory to God Almighty through Jesus Christ!

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DECLARATION OF ORIGINALITY

Full names of student: Petrus Paulus Johannes Rabe

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I declare that the thesis, **Self-differentiation, pride and commitment of university students**, is my own original work and that literature resources quoted or referred to have been properly acknowledged in accordance with the requirements of the Department of Educational Psychology and the policy of the University of Pretoria. To the best of my knowledge I have not used the work of any other person in order to claim it as my own.

Mr P P J Rabe

Date

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CLEARANCE NUMBER :

UP 11/05/07

DEGREE AND PROJECT

PhD

Self-differentiation, pride and commitment of university students

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SUMMARY

In the present study the overarching aim was to investigate the relationship between commitment, self-differentiation and pride in undergraduate university students with the view to achieve a better understanding of the extent to which identity-related factors such as self-differentiation and pride as a self-relevant emotion may shape the strength of commitments in a higher education setting.

Findings of the study may contribute to the literature on the psychology of academic commitment by distinguishing it from academic engagement (Baldwin & Koh, 2012) and by broadening the study of commitment to include identity-related constructs in the development of academic commitment (Lord, Diefendorff, Schmidt & Hall, 2010).

I argue that a well-differentiated self is relevant to academic commitment because it may provide coherency and consistency in commitments. Academic commitment was operationalised as the extent to which students experience their studies as a source of satisfaction and meaning, the extent to which they have invested resources in their studies, and the quality of alternatives available (Rusbult, Martz & Agnew, 1998). I examined self-differentiation in terms of the ability to take an I-position in the absence of Emotional Reactivity, Emotional Cutoff and Fusion with Others (Skowron & Friedlander, 1998). Authentic pride was described as a self-relevant emotion consisting of two dimensions, namely Authentic and Hubristic pride (Tracy & Robins, 2007d). The Meaning Maintenance Model (MMM) as discussed by Heine, Proulx & Vohs (2006) was the conceptual framework that guided the study.

A quantitative cross-sectional survey was asked for the implementation of a questionnaire that consisted of demographic factors, the Academic Commitment Scale (ACS), the Differentiation of Self Inventory (DSI-R) and the Authentic and Hubristic Pride Scales (AHP). A pilot study was conducted to test the new Academic Commitment Scale's reliability and construct validity. A one-stage random cluster sampling method was used to complete a sample of undergraduate students from two faculties at the same university. Results of the main study were reported in Chapter 4 and a discussion of findings and conclusions, as well as the contribution, limitations and recommendations for future research were addressed in Chapter 5.

Findings of the study indicate that commitment as an identity-level construct, related to identity-related constructs such as differentiation of self and pride, can be utilised in a higher education setting to differentiate between high performance students and students at risk of failure. The results can thus assist policy makers, lecturers, educationists and psychologists to achieve a better understanding of the factors underpinning academic success on the one hand and student dropout on the other hand, in order to develop appropriate support programs. A main feature of the study was the development of a new scale to measure commitment in an academic context. The Academic Commitment Scale was created based on an adapted version of the Rusbult et al. (1998) Investment Model. Meaningfulness was added as a fifth subscale which turned out to be a strong predictor of academic commitment.

Key words:

- ❖ Academic commitment
- ❖ Identity-level self-regulation
- ❖ Meaningfulness
- ❖ Future-orientation
- ❖ Identity-level commitment
- ❖ Identity-investment
- ❖ Self-regulatory learning
- ❖ Learner engagement
- ❖ Differentiation of self
- ❖ Authentic/Hubristic pride.

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CHAPTER 1

INTRODUCTION, BACKGROUND, PROBLEM STATEMENT, BACKGROUND, RESEARCH DESIGN, RESEARCH METHODOLOGY AND ETHICAL CONSIDERATIONS

1.1 INTRODUCTION

As student, teacher, school principal and educational psychologist I have observed that some students distinguish themselves from their fellow students in terms of their ability to take responsibility for their own learning and to manage their studies in an effective way. They seem highly motivated, with a work ethic that elevates them beyond the standards of the average student. They thrive on their studies, have much self-control, and are oriented towards attaining future expectations and goals. In sum, I regard them as independent learners with a high sense of self-confidence and competency, as well as highly committed and dedicated individuals.

Continuous development in technology significantly affects modern learning environments by demanding students to become more independent and self-directed in managing their studies (Kop & Fournier, 2010). It is well acknowledged that the self in terms of personal agency and autonomy is of significant importance for self-regulation (Kop & Fournier, 2010; Lord, Diedendorf, Schmidt & Hall, 2010). In the present study I argue that effective and lasting learner engagement requires identity-level regulation (Human-Vogel, 2013; Lord et al., 2010, p. 550) to ensure effective resource allocation and autonomous self-regulatory learner behaviours. The self can be described as comprising the subjective self, or “I” self based on “an ongoing sense of self-awareness” (Tracy & Robins, 2007f, p. 5), and the objective self, or “me” self, manifesting in mental self-representations that constitute identity (Tracy & Robins, 2007f, pp. 5-6). Self-awareness implies an objective knowledge of the self (Tracy & Robins, 2007f, pp. 5-6). An ongoing sense of self implies future-orientation with regard to goal setting and goal commitment in respect of a particular course of action (Human-Vogel, 2008, p. 117; Lord et al., 2010, p. 547). Harmonious and balanced interactions between affective and cognitive processes are thought to shape identity-level self-regulation (Human-Vogel, 2013; Lord et al., 2010, p.

546; Skowron & Friedlander, 1998, p. 235). Personal agency with regard to identity-level self-regulation (Human-Vogel, 2013; Kop & Fournier, 2010, p. 3; Lord et al, 2010) is manifested in stable self-construals at unconscious as well as conscious levels of self-regulation, guiding emotions and behaviours in respect of the constitution of long-lasting commitments over time (Baumeister & Vohs, 2003, p. 197; Lieberman, 1998; Lord et al., 2010, pp. 546, 550).

In the present study I am arguing that the ability to develop and maintain a stable and differentiated sense of self is theoretically relevant to the study of identity-level self-regulation. *Self-differentiation* is described in literature as the ability to balance the forces of togetherness and autonomy in emotionally committed relationships, and is thought to contribute significantly to greater psychological adjustment and well-being through greater emotional stability and effortful control (Baumeister & Vohs, 2003, p. 197; Skowron & Friedlander, 1998, p. 235; Skowron, Holmes & Sabatelli, 2003, p. 124; Tangney, Baumeister & Boone, 2004, p. 287). *Pride* as a self-relevant emotion is also described as a moral emotion (Tangney, 2005, p. 384) because pride provides the self with critical feedback about its thoughts, intentions and behaviours. In the present study, pride represents the affective component of commitment. I reason that pride can exert a positive influence on the development and maintenance of commitment, because commitments often involve a moral decision to persevere with a chosen path of action (Lieberman, 1998).

In the present study, I thus examine the relevance of identity-related factors, such as differentiation of self and pride, to explain academic commitment. Academic commitment is discussed in terms of its role in the guidance of behaviours, enhancement of self-understanding and constitution of identity (Lieberman, 1998, pp. 2, 5, 86), as well as, in particular, its relevance to academic achievement. The background to the study is discussed in the next section, based on literature perspectives in terms of a few introductory remarks regarding the problem of student attrition and dropout at higher education level, after which student self-regulation in respect of differences between authentic commitment and engagement will be addressed.

1.2 BACKGROUND TO THE STUDY

1.2.1 STUDENT ATTRITION AND DROPOUT AT HIGHER EDUCATION LEVEL

Several studies (Barefoot, 2004; Peterson, Louw & Dumont, 2009; Willcoxson, 2010) address the problem of attrition in higher education, and a wide range of factors are thought to lead to students' decision to discontinue their studies. Chief among these include students' level of maturity, unpreparedness for academic studies, a lack of self-efficacy, personal feelings of belonging, dissatisfaction with the academic situation and the absence of a definite commitment to a particular career direction or degree (Barefoot, 2004, pp. 10, 12; Willcoxson, 2010, p. 627).

In South Africa, student enrolment increases annually, and many students in higher education are to a large extent economically and educationally disadvantaged (Petersen et al., 2009, p. 99). Poor academic preparation, lack of effort and inadequate schooling are some of the reasons why the transition to higher education is a difficult and unpleasant experience for many students. These unpleasant experiences often manifest in adjustment and psychological problems related to social and academic demands that students are faced with in the university environment (Barefoot, 2004, p. 13; Petersen et al., 2009, p. 102). The aforementioned factors put students at risk of academic failure and augment the likelihood of dropping out from university before completing a degree (Barefoot, 2004, p. 12; Berzonsky & Kuk, 2005, pp. 243-244; Willcoxson, 2010, p. 624). New and challenging technologies on the educational front demand students to take greater responsibility for their own academic performance and progress, and in this respect a significant number of students seem to be not technologically accomplished (Kop & Fournier, 2010, p. 2) and not adequately equipped to cope with the demands they are faced with at university level. As Berzonsky and Kuk (2005, p. 243) point out, some students do not respond to academic demands positively and lack a definite sense of personal autonomy and academic purpose. Findings indicate that these students tend to avoid academic involvement, seemingly because they do not have a clear academic career and life plan, do not have proper management skills, find it difficult to study according to a well structured time schedule and use maladaptive cognitive, coping strategies (Berzonsky & Kuk, 2005, p. 243). A study conducted by Richardson, King, Garrett and Wrench (2012, p. 87) explores some of the strategies students generally use to manage transition to university, and they found that many students struggle to cope with the competitive, learning demands posed to them in terms of personal and study

commitments. They were emotionally overwhelmed and as a result generally revert to passive or avoidance strategies in managing feelings of stress and anxiety imposed on them by new academic experiences (Richardson et al., 2012, p. 91). Students displaying such an academic profile described themselves as “just surviving” (Richardson et al., 2012, p. 87) and achieved the lowest scores on measures of commitment. As a result, they are at risk of academic and adjustment problems that may eventually lead to dropout from university before graduation (Berzonsky & Kuk, 2005, p.243).

In comparison with students who struggle to cope with the competitive demands of university life, Berzonsky and Kuk (2005, p. 242) found that some students entering university possess high levels of academic autonomy, as well as a definite sense of educational purpose and social skills. They generally perform well, taking control of their own performance/progress and seem to be more efficient in managing their academic activities. They take responsibility for their own learning and despite unfavourable circumstances or disadvantages, they nonetheless inherit a strong desire to learn, while thriving on and enjoying learning encounters (Human-Vogel, 2008; McDonald & McLaughlin, 2010, p. 65). Students who perform well generally have a study plan in place which provides for completion of work at an appropriate pace (time management) and they possess the basic study skills to perform well (McDonald & Mclaughlin, 2010, p.65). They appear to be academically well prepared, highly effective in organising and managing academic and social programs with a clear commitment to their studies, consequently functioning at a higher level in comparison with their fellow students (Berzonsky & Kuk, 2005, pp. 242-243). “Thriving students” (Richardson et al., 2012, p. 91) regard themselves as being highly effective, particularly at time management in respect of a well-planned and balanced time schedule. They thus make provision for adequate study time as well as for the allocation of time for relaxing and enjoyable activities (Richardson et al., 2012, p. 91). On the contrary, students who are just “surviving” believe that they do not have sufficient time for enjoyable and relaxing activities and further believe that support from university friends and lecturing staff is inadequate and less than expected (Richardson et al., 2012, pp, 90-91). Aspects related to how students deal with stress caused by higher education life will be addressed next, particularly in terms of differences between engagement and commitment.

1.2.2 SELF-REGULATION IN STUDENT ENGAGEMENT AND LEARNER COMMITMENTS

Self-regulation is, in general terms, described as the executive function of the self and is regarded as the fundamental process responsible for the actions of the individual. Thus, self-regulation as such represents an important adaptive aspect of the self that initiates and guides current behaviours, particularly with regard to the achievement of long term goals (Baumeister & Vohs, 2003, pp. 197, 199-200). The self is to a large extent the product of self-regulation in terms of developing and maintaining a coherent sense of identity (Baumeister & Vohs, 2003, p. 198). Lord et al. (2010) imported a new perspective on self-regulation by presenting a theoretical model of self-regulation, based on the assumption that self-regulation represents internally determined processes (“within-person processes”, Lord et al., 2010, p. 544). These processes occur within certain time cycles (Lord et al., 2010, p. 548) and become operative when dynamic interactions between affect and cognition are activated on the different levels of consciousness (Lord et al., 2010, p. 547). Lord et al. (2010, p. 543) also identified four different levels at which self-regulation is concretised, namely *the self*, *achievement task*, *lower-level task action* and *knowledge memory*. Furthermore, self-regulation can be described as consisting of future-oriented processes, occurring at different levels of abstraction: *micro*, *low*, *intermediate* and *high* (Horstmanshof & Zimitat, 2007; Lord et al., 2010, p. 547). At the intermediate level of abstraction self-regulation centres around achievement tasks, functioning within a short time cycle, aimed at goal-achievement, whereas longer time cycles are more associated with high-level regulation of the self (Lord et al., 2010, p. 547). Currently, the self is widely acknowledged as a personal agent responsible for driving self-regulation over longer periods of time (Lord et al., 2010, p. 550). According to Lord et al. (2010, p. 550) construals of the self, developing within longer time frames, are more abstract and coherent than construals in the near future. High-level regulation of the self can be described as “identity-level self-regulation” (Human-Vogel, 2013) and at this level of abstraction the existing self is enhanced and new identities are formed (Lord et al., 2010, p. 550).

An overview of the literature on self-regulated learning reveals that self-regulation is generally described as engagement related to aspects such as, among others, student experience (Mathews, Andrews & Adams, 2011; Modipane, 2011; Wolniak, Mayhew & Engberg, 2012), resource management, particularly in respect of time management and investment of effort (Pintrich, 1999; Richardson et al., 2012; Wong, 2000), academic skills (Modipane, 2011) and teaching practice (Kahu, 2011). Several studies conducted on self-

regulation in learning contexts focused to a great extent on student engagement. Pintrich (1999, p. 459) defines self-regulated learning in terms of certain strategies (engagement strategies), using by students to regulate and control cognition in learning as well as to manage resources at the achievement task level of self-regulation. Pintrich (1999, p. 467) argues that students have to be motivated to use various strategies on a particular level of engagement in order to invest time and effort in self-regulated learning. Findings also indicate that self-efficacy and task value beliefs are positively related to self-regulation in learning (Pintrich, 1999, p. 467). Pintrich (2004, pp. 397-398) further supports the view that engagement oriented behaviours are related to acts such as monitoring, controlling and regulating learner behaviours, particularly in respect of time and environment management. These behaviours include quality of effort spent on tasks that are difficult, boring and uninteresting. Academic engagement in terms of a task-orientated perspective further refers to the ability to continue engagement with a task until completion and as such is related to self-regulation and learning goal motives (Oliver, Guerin & Gottfried, 2007, p. 228). As Kuh (2009, p. 6) points out, current views on engagement include constructs such as the quality of students' effort and involvement in productive learning activities. Kuh (2003, p. 25; 2009, p. 6) is also in agreement with the view that the amount and quality of time and effort devoted to study activities to improve capacity for continuous learning and self-development, are functioning central to student engagement as a construct in learning contexts.

Students in higher education who experience difficulty with daily academic demands often attempt to cope by managing and regulating negative emotions (down-regulation) that confront them (Human-Vogel, 2008, p. 116). Coping strategies that are focused on managing daily demands can be described as self-regulation that is focused on task execution and achievement (Lord et al., 2010), and include self-regulatory behaviours aimed at dealing with immediate stress associated with maladaptive negative emotions (Lord et al., 2010). On the contrary, dedicated and successful students seem to be high in self-control and self-discipline (Tangney et al., 2004). Thus, they are more capable of managing their studies and dealing with stress effectively, even under difficult and unfavourable circumstances (Tangney et al., 2004). Students who take responsibility for their own learning can be described as effective self-regulatory learners, displaying high levels of autonomy and independence (Mckendry & Boyd, 2012; Wong, 2000).

Krause and Coates (2008) attribute more attention to the importance of personal agency and self-awareness in developing a "self-managed learner" (Krause & Coates, 2008, p.

500). Independent and self-directed capacities are needed for students to successfully shift from subject study at school to the more discipline-oriented study at higher education level (Krause & Coates, 2008, p. 500). However, Krause and Coates (2008, p. 500) describe independent and self-managing learners in terms of attitudinal and behavioural patterns, operating at the engagement level of self-regulation. Baldwin and Koh (2012, p. 115) investigated learning styles and student disengagement in terms of surface learning versus deep learning as the expected styles students use when entering university for the processing of information at the cognitive level. In order to promote students' engagement with study material Baldwin and Koh (2012, p. 119) argue that assessment techniques that are based on the acquisition of skills can support students in their attempts to engage with study material. Integration of assessment techniques can also provide students with feedback that is based on development, skills and tasks, indicating level of performance and encouraging them to adopt a deep learning approach with the view to enhance engagement of students across the course (Baldwin & Koh, 2012, p. 119).

In addition, Wong (2000, pp. 322-323) found that autonomy-oriented learning positively correlates with academic experience, academic performance and academic commitment. Wong (2000, p. 322) describes academic commitment in terms of the percentage of time and effort invested in learning activities. Wong (2000, p. 323) also argues that autonomy inherits the capacity to exert a positive influence on academic experience and commitment and that autonomous students tend to *engage in academic activities to regulate behaviour* in order to meet and achieve personal needs and goals. On the other hand, students highly control-oriented, engage in academic activities which they regard as important to others (Wong, 2000, p. 323). However, engagement as a self-regulatory learning construct functions on the intermediate level of abstraction, since it involves achievement task behaviours which are mainly goal directed within a limited time frame (Human-Vogel, 2013; Lord et al., 2010, p. 547).

Human-Vogel's (2013) definition of commitment is in contrast to the aforementioned views on self-regulated learning and student engagement. Whereas Wong (2000, p. 322) defines commitment in terms of percentage of time and effort invested, Human-Vogel (2013) describes self-regulation in terms of identity-level self-regulatory processes. Thus, self-regulation involves processes of the self such as self-awareness and self-knowledge, capable of regulating behaviours at lower levels of abstraction (Human-Vogel, 2013). Furthermore, according to Human-Vogel (2013) identity-level self-regulation provides the necessary coherence and consistency (stability) in self-regulatory behaviours at the lower

levels of abstraction in self-regulation. Human-Vogel (2013) therefore defines commitment as “identity-level self-regulation” (Human-Vogel, 2013) which implies that authentic commitment as a long-lasting process essentially requires identity investment at the achievement task level of abstraction (Human-Vogel, 2013). Contrary to Wong’s (2000, p. 319) conceptualisation of commitment in respect of the percentage of time devoted to studies, Human-Vogel (2013) argues that time and effort invested into studies merely give an indication of the extent to which students’ are actively involved in their studies and as such can be more accurately described as engagement (Human-Vogel, 2013; Krause & Coates, 2008, p. 500). Processes of student engagement can be viewed as behavioural functions at the lower intermediate, achievement task level of self-regulation (Lord et al., 2010), and thus regarded by Human-Vogel (2013) as a consequence of commitment and not commitment in itself. Human-Vogel (2013) argues that self-regulatory behaviours are guided by the immediate as well as the distant future self on the high-level regulation of the self. In sum, Human-Vogel (2013) formulates three important assumptions with respect to research on commitment, namely “(a) commitment reflects identity-level self-regulation, (b) commitment regulates behavioural choices in relation to the immediate and future self, and (c) only commitments conceptualised as identity-level self-regulation can explain coherence and consistency in self-regulation in various settings” (Human-Vogel, 2013). The present study on academic commitment is to a large extent based on Human-Vogel’s (2013) assumptions in respect of the nature of true commitment as identity-level self-regulation.

1.2.3 COMMITMENT, SELF-DIFFERENTIATION AND PRIDE

Commitment in the present study is explained in terms of its role in the guidance of action, enhancement of self-understanding and constitution of identity (Lieberman, 1998, pp. 2, 5, 86). *Substantive commitments* in particular, are regarded as fixed points or experiences around which people structure a coherent and meaningful story of their lives (Lieberman, 1998, p. 175). Commitments, characterised by their stability over time (unlike intentions, desires and policies), are sensitive to the demands of consistency and coherency, because they often involve certain norms, beliefs, ideals and values (Lieberman, 1998, pp. 86, 88). Commitment involves future-oriented self regulatory processes and is as such concerned with future self-construals that develop over time and are associated with high identity-level self-regulation (Human-Vogel, 2013; Lord et al., 2010, p.550). It is thus more than likely that highly committed individuals will persist in their current relationships, will tend to experience more satisfaction, will invest more resources into a particular

relationship and as such be less likely to withdraw from relationships in comparison with less committed individuals (Rusbult, Martz & Agnew, 1998). In this respect commitment appears to function as a powerful motive in long lasting relationships (Rusbult et al., 1998). Le and Agnew (2003) found that the attributes of commitment in terms of satisfaction, quality of alternatives and investment can be successfully extended to domains other than romantic relationships, such as job commitment, commitment to institutions and for the purpose of the present study, to academic commitment.

It is also suggested that the self, as far as it involves differentiation of self, particularly in terms of the ability to take an I-position (Skowron & Friedlander, 1998), inherits the capacity to play an important role in self-regulatory processes at the identity-level of self-regulation (Lord et al., 2010; Oyserman, Bybee, Terry & Hart-Johnson, 2004). Oyserman et al. (2004) hypothesised that better academic results depend on the involvement of a “possible self” (Oyserman et al., 2004, p. 130), acting as a self-regulator. It is also argued that commitment presents itself as a self-regulatory process wherein the self acts as the personal agent, providing individuals with the capacity to make decisions and to regulate their actions and behaviours (Human-Vogel, 2013; Lord et al., 2010). Commitment is described by Demerath (2006) and Lieberman (1998) as commitment to an identity based on the meaningfulness of that particular identity. The occurrence of commitment is dependent on a well differentiated self in terms of a stable/solid sense of self or the ability to take a strong I-position in respect of self-understanding and self-knowledge that will remain coherent and consistent over a period of time (Human-Vogel, 2008; Lieberman, 1998; Skowron & Friedlander, 1998). Lord et al. (2010) also emphasise the role of affect in interaction with cognition on different levels of consciousness and argue that affect and cognition in cooperation with each other are responsible for shaping self-regulation and identities.

Affect in the present study is expressed by pride as a self-relevant or moral emotion. Pride is believed to have the potential to build and enhance a solid sense of self (well-differentiated self) in terms of positive self-views (Skowron & Schmitt, 2003; Tracy & Robins, 2007b). Pride may also play a significant role in motivating social behaviours in respect of being accepted in important social relationships, as well as appreciated for being successful in achievement domains (Tangney, 2005; Tracy & Robins, 2007a, 2007f). Pride, as with commitment, also displays the capacity to invoke a desire to pursue success despite stumbling blocks and as such is regarded as a mediator in commitment that can increase perseverance in relational and achievement domains (Williams &

DeSteno, 2008, 2009). Pride also seems to be capable of influencing persistence with commitments positively in terms of pride feelings that are evoked when one's behaviours are congruent with morally and socially acceptable standards (Tangney, 2005). The problem statement and rationale regarding the present study are discussed in the next section.

1.3 PROBLEM STATEMENT AND RATIONALE

At higher education level students need the capacity to manage or regulate their learning activities such as study time, study habits and study strategies on their own in order to be successful (Krause & Coates, 2008, p. 500). Research in the past (see Section 1.2.2) was more task-oriented, (focusing on the development of, among others, skills and strategies in order to deal with academic challenges). However, recent studies conducted on student engagement began to highlight the role of personal agency and self-awareness as preconditions for the development of a student as a “self-managed learner” (Krause & Coates, 2008, p. 500) or “independent learner” (Mckendry & Boyd, 2012, p. 209). The implication is that students are compelled to become more self-directed and independent in approaching academic demands, entailing both attitudinal and behavioural patterns (Krause & Coates, 2008, p. 500). Even though students may realise that they need self-development to become independent learners and that they should take responsibility for their own learning, they may find it difficult to understand the requirements of higher education. In this regard they seem to be poorly informed of what the implicit meaning of the independent learner actually entails (Mckendry & Boyd, 2012, pp. 209, 216) in terms of self-knowledge (identity) and the application of effective, adequate self-regulatory mechanisms and strategies. Nevertheless, the need for students to develop their own capacity to engage in effective independent learning or “self-directed learning” (Kop & Fournier, 2010, p. 2) still remains strong in higher education settings today (Mckendry & Boyd, 2012, p. 216).

To achieve effective long-term engagement in an academic career, students need to commit themselves to their learning. In the present study, commitment as a self-regulatory mechanism (Human-Vogel, 2008) is investigated in the context of Lord et al.'s (2010) conceptualisation of self-regulation, which posited that self-regulation entails dynamic interrelations between affect and cognition, functioning at multiple levels of consciousness at different levels of abstraction (Lord et al., 2010, p. 547). Viewed from this perspective it can be concluded that commitment differs from engagement in the

sense that commitment is a construct related to high-level identity formation and identity development, particularly in terms of objective self-knowledge and self-perception and as such future-oriented. In sum, a review of the literature on student engagement in academic context reveals that engagement in general terms refers to students' involvement and experience in learning activities related to performance, achievement and success (Kuh, 2003, p. 25; Kuh, 2009, pp. 6, 14). In this regard Wong (2000, pp. 315, 319, 324) explains academic commitment in terms of the amount of time (percentage) allocated to studies as well as in terms of course level progression, from which it can be concluded that engagement and commitment are viewed as being related to the same construct within an autonomy and control orientated framework.

In addition, Kahu (2011, p. 12) points out that various studies conducted in the past mainly focus on student behaviours and cognition, while the immediate emotional responses of students to their learning largely received little attention. According to Kahu (2011, p. 12) the role of emotion in student engagement presents itself as an area in need for further research in higher education and in this respect Tugade and Fredrickson (2007, p. 325) suggest that resilient people are particularly proficient at using positive emotions in their coping processes. Emotion regulation represents an integral part of identity-level self-regulatory learning and a healthy and well-differentiated, congruent identity may result in more adaptive regulation of positive emotions while performing a task at the lower levels of abstraction (Human-Vogel, 2013). Human-Vogel (2013) argues that the influence of positive emotions on self-regulation is neglected and underestimated in research, despite the existence of findings that suggest, for example, that positive mood possesses the capacity to exert a significant influence on academic performance and achievement (Human-Vogel & van Petegem, 2008).

An identity-level approach to commitment further implies that the meaningfulness of an identity (Demerath, 2006) will be conducive to more authentic and meaningful learning experiences, encouraging students "to engage in meaningful educational opportunities" and thus "less likely to disengaged from academic studies" (Human-Vogel & Dippenaar, 2012, p. 3), even in the face of difficulties or dissatisfaction. On the other hand, students who engage in learning activities simply to achieve a particular goal at the achievement and task level, such as merely meeting the requirements of an assignment or obtaining a degree, will probably withdraw from the task or avoid engagement with the task if it is experienced as meaningless, which could eventually lead to complete withdrawal from academic studies, seeking alternatives.

Furthermore, Kahu (2011, pp. 1, 11) argues that student engagement encompasses a complex structural, psychosocial and socio-cultural process, which is widely recognised as a construct capable of significantly influencing achievement and learning processes in higher education settings. However, Kahu is of the opinion that key problems still exist as a result of inadequate definitions of student engagement and a lack of proper distinction between the sources or state of engagement, factors that apparently have a significant influence on student engagement activities, including the more immediate and longer term consequences of engagement (Kahu, 2011, pp.1, 11). Kahu (2011, pp. 2-3) also argues that the prevailing approach in research on engagement in higher education mainly focuses on the role of teaching practice and student behaviour, incorporating students' thinking and behavioural processes carried out at academic challenge and collaborative learning levels. Kahu (2011, p. 12) expresses the opinion that a better understanding of student engagement and the underpinnings of engagement will put us in a better position to meet the needs of students, thus leading to the improvement of student experience and educational outcomes.

From the aforementioned discussion on student engagement and commitment, it can be concluded that no clear understanding of student engagement as a complex self-regulatory process currently prevails and as such engagement as a construct fails to explain why some students apparently display the capacity to manage their own learning activities independently, conscientiously, responsibly and on a long-term basis despite unfavourable circumstances. In the present study commitment as identity-level self-regulation (Human-Vogel, 2013) in its relationship with self-differentiation as an identity-level correlate of the self, and pride as a positive identity-related emotion, is investigated in respect of its potential capacity to predict learner behaviours at the lower task and achievement levels of engagement. With reference to the findings of previous studies on academic performance and achievement, the importance of student agency and student responsibility as identity related issues were to a great extent neglected and overlooked (Van Schoor, 2012, p. 85).

As a result of the sparseness of available literature in respect of the role of commitment, self-differentiation and pride as identity-level self-regulatory constructs in achievement at higher education level, it is believed that more research with regard to the aforementioned constructs is needed in order to achieve a better understanding of commitment in an academic context. For example, Skowron and Dendy (2004) argue that little empirical support exists with regard to the role that self-differentiation can play in greater self-

regulatory skills. Williamson, Sandage and Lee (2007) express the opinion that the relationships between self-relevant emotions and self-differentiation are to a great extent not adequately investigated. Skowron, Holmes and Sabatelli (2003) argue that, although researchers admit that self-differentiation is important to the understanding of psychological health and well-being, the development of proper measures is lacking and far behind theoretical advancements.

In comparison with the study on basic emotions and other self-relevant emotions such as shame and guilt, pride is described as “something of an underdog” (Tracy & Robins, 2007d, pp. 263-264), while Tangney (2005) refers to it as “the neglected sibling” (Tangney, 2005, p. 395) of self-relevant emotions. Particularly, very little research has addressed the impact of individual differences in proneness to pride and their implications for achievement motivation and behaviour, which is of course, an important objective of the present study (Tangney, 2005, p. 396; Tangney, Stuewig & Mashek, 2007b, p. 360. The interactive influence of moral emotional factors in moderating the link between moral standards and moral behaviour has also been sidelined by researchers in the past (Tangney et al., 2007b, p. 363). Future studies are recommended to examine, for example, the relatedness between authentic pride, genuine self-esteem and self-competence (Tracy, Cheng, Robins & Trzesniewski, 2009, p. 210). In addition, there are still important issues surrounding variation of emotional factors, particularly in respect of pride experiences in *cross cultural contexts*, for future research to address (Tracy & Robins, 2007b).

In the South African context the impact of cultural differences on academic learner behaviours in our higher educational institutions is touched on and investigated mainly in terms of student life in schools and higher education institutions in respect of race, democracy and education since 1994. Student representation in schools and higher education institutions in terms of race/culture has changed dramatically since 1994, and the impact is still noticeable in the transformation process of cross-cultural adaptation and adjustment. For example, Jansen (2004, p. 119) argues that undergraduate students at former white universities are deeply alienated from each other. Black and white students made their first contact on an equal footing and they were suddenly thrown into an environment within which they have to adapt to university education based on “mutual respect and noble exchange” (Jansen, 2004, p.119). A study was also conducted at the University of KwaZulu-Natal (formed by way of a merger between two formerly universities which existence was based on race) with regard to the development of

student identities during the transformation period since 1994 (Pattman, 2007, p. 473). The findings indicate that culture in terms of race is still the predominant factor influencing student identifications (Pattman, 2007, p. 473). Van Dyk and De Kock (2004) studied the relevance of individualism and collectivism among a group of undergraduate officer students and found no differences between different cultural groups with regard to the levels of individualism-collectivism (Van Dyk & De Kock, 2004, p. 93). The results probably represented a shift from a collectivistic to a more individualistic form of self-construal and that students tend to adopt a moderation that no longer strictly adheres to traditional stereotypical orientations (Van Dyk & De Kock, 2004, 94). Eaton and Louw (2000, p. 210) conducted a cross-cultural study in respect of the abstract-concrete and independent-interdependent dimensions of self-construal among students in South Africa. They found that African-language speakers, in accordance with individualism-collectivism theory, describe themselves predominantly in terms of a more interdependent and a specific, concrete defined self within social relationships (Eaton & Louw, 2000, pp. 211, 216). However, Eaton and Louw (2000, p. 215) argue that the results of their study must be treated with caution, because university students in South Africa typically are more exposed to individualism than to what the general population is exposed to (Eaton & Louw, 2000, p. 215). As a result, the prevailing individualistic approach to academic achievement demands emphasises individual striving, competition and the development of individual potential (Oyserman, 1993, as cited in Eaton & Louw, 2000, p. 215).

It follows that this process of forming new identities (which is still in its infancy, Pattman, 2007, p. 473) at the various levels of student life in higher education institutions in South Africa (including academic engagement and commitment), will necessarily affect the nature and the role of “the student self” in terms of self-differentiation and pride in relation to commitment in the present study. Furthermore, I believe that student-identity formation in modern higher education institutions in South Africa is a two-way interactive process, implicating that white students were also and are still exposed to cross-cultural influences at school and higher education levels since 1994. Subsequently new student identities are formed continuously within a unique and ever developing cross-cultural environment. This aspect of identification formation in higher education institutions in South Africa has as yet not been investigated extensively, particularly in terms of academic commitment and as such opens the field for future research.

Although researchers acknowledged the role of commitment as a trigger mechanism, there seems to be no consensus on the causes of commitment (Demerath, 2006, p. 497;

Human-Vogel, 2008). According to Rusbult et al. (1998, p. 358) most researchers agree that commitment plays a key role in understanding why some relationships persist over time, whereas others do not. Human-Vogel (2008, p. 116) found that the topic is well studied in organisational management and marketing contexts with the focus on goal commitment, but in terms of sustainable student engagement in higher education settings, a more comprehensive study of commitment is virtually absent. As yet, no extensive research on academic commitment has been conducted in higher education settings (Human-Vogel, 2013). Therefore, the outcome of the present study will hopefully promote a better understanding of the similarities and differences between student commitment and student engagement in terms of the forces that drive the two constructs.

1.4 AIM OF THE STUDY

1.4.1 OVERARCHING AIM

The overarching aim of the present study was to investigate the relationship between commitment, self-differentiation and pride in order to achieve a better understanding of the extent to which identity-related factors such as self-differentiation and pride, as a self-relevant emotion, may shape the strength of commitments in a higher education setting.

1.4.2 Research objectives

The following objectives were set with the view to address and realise the overarching aim:

- 1) to conceptualise *commitment* in a higher education setting in relation to *self-differentiation* and *pride*. To achieve this objective, correlation among these constructs was investigated. A correlational survey was conducted with the aim to describe and explain the relationships in terms of certain characteristics as reflected in students' responses to a number of variables contained in a combined questionnaire (Mertens, 2010a, p. 162; Mertens, 2010d, p. 177),
- 2) the adaptation of the original Rusbult et al. (1998) Investment Model Scale with the view to develop a new scale namely, the Academic Commitment Scale (ACS), in order to measure commitment in a non-relational, academic context,
- 3) to explore the feasibility of utilising meaningfulness as an additional subscale of the adapted Academic Commitment Scale (ACS), since the original Rusbult et al.

(1998) Investment Model Scale does not provide for identity-level aspects of self-regulation (Human-Vogel, 2013),

- 4) to determine to which extent demographic factors such as age, gender, home language, academic year of study and place of residence are related to students' level of commitment, and
- 5) to determine to which extent self-regulatory factors such as learner autonomy (study management, satisfaction with study course), resource allocation (study-time, social networking, job-involvement, family support) and goal-setting (learning and life-goals) are related to students' level of commitment.

1.5 CONCEPT CLARIFICATION

1.5.1 IDENTITY

Baumeister and Vohs (2005, p. 197) describe the self as an active, involved and responsive entity that initiates, among others, the processes of self-control and self-regulation in interpersonal relations. An inherent and associative impulse enables people to relate objects and events within their world to each other and to the self. In this context a sense of meaning functions instrumental in connecting the elements of the self, within the self and within the self in relation to the world (Heine, Proulx & Vohs, 2006, p. 90). Demerath (2006, p. 493) defines meaningfulness as *conceptual power* which enables the individual to understand the past, present and future of the object, the world and the self. In the present study it is argued that the self functions central to academic commitment in terms of the meaningfulness of a particular identity.

1.5.2 DIFFERENTIATION OF SELF

With reference to *differentiation of self* Bowen's (1978, as cited in Skowron & Friedlander, 2006, p. 235) definition is described as the degree to which an individual is able to balance emotional and intellectual functioning, and intimacy and autonomy of the self in relationships. Differentiation of self on intra-psychic and interpersonal levels respectively, refers to a person's ability to distinguish thoughts from feelings and the ability to experience intimacy with comfort in close relationships. Greater differentiation of self enables an individual to choose whether one would like to be guided by one's emotions or by one's intellect (Skowron & Friedlander, 1998, p. 235). Individuals with a well-differentiated sense of self refrain from engaging in fusion or emotional reactivity and

emotional cutoff in coping with their feelings of insecurity and anxiety. Individuals who tend to be *emotionally reactive* in their behavioural encounters with others find it difficult to remain calm in response to the emotionality of others (Skowron & Friedlander, 1998, p. 235). Greater fusion in interpersonal relationships is associated with attachment insecurity (Skowron & Schmitt, 2003, pp. 209-210). The ability to take a strong and stable *I-position* in relationships is demonstrated by a clearly defined sense of self that enables one to adhere to personal convictions, even when pressurised by others to do otherwise (Bowen, 1978, as cited in Skowron & Friedlander, 1998, p. 235). *Fusion with others* can be described as an “overinvolvement with significant others in decision making” (Skowron & Schmitt, 2003, p. 210). People using fusion in regulating their emotions find it difficult to express their own opinions independently of significant others and also refrain from making decisions on the basis of their own values, beliefs and convictions. The nature of *Emotional cutoff* is characterised by a tendency to become emotionally isolated from others, particularly denying the importance of parents and other family members and also pretends to be independent from others (Skowron & Friedlander, 1998, p. 236). However, the emotionally cut off individual, as well as the fused individual are both poorly differentiated, displaying a self-esteem that is largely dependent on others for approval and generally conforming to views and convictions of others (Skowron & Friedlander, 1998, p. 236). The ability to balance the forces of togetherness and autonomy in emotionally committed relationships as expressed by the concept of self-differentiation seems to contribute to greater psychological well-being and adjustment, greater emotional health, as well as greater emotional and intellectual self-control (Skowron & Dendy, 2004, p. 337; Skowron et al., 2003, p. 124; Skowron & Friedlander, 1998, p. 235).

1.5.3 PRIDE

Pride, along with other self-relevant emotions such as shame, guilt and embarrassment, is fundamentally an expression of one’s identity and may as such contribute to the development of a sense of identity or a “genuine and deep-rooted sense of self-esteem” (Tracy & Robins, 2007b, p. 264). Pride, as other self-relevant emotions, is also referred to as a moral emotion, since it possesses an important self-regulatory function by giving critical feedback to the self about thoughts, intentions and behaviours (Tangney, 2005, p. 384). Theoretically, pride as a self-relevant emotion may influence the development and maintenance of commitments due to the fact that commitments very often involve a moral decision to remain on a chosen path. Pride as a positive emotion also presents itself as a potential motivational force (Tangney et al., 2007b, p. 347) that may serve important

motivational functions such as reinforcing and rewarding commitments (Tangney et al., 2007b, p. 360), promoting and attaining social status (Tracy & Robins, 2007f, p. 6), as well as mediating perseverance in commitments (Williams & DeSteno, 2008, p. 1007). Tracy and Robins (2007d) distinguish between two facets or dimensions of the pride experience, namely authentic pride and hubristic pride. Authentic pride can be described as a prosocial and achievement-motivated emotion, strongly linked to agreeableness and conscientiousness as two important dimensions of achievement and prosocial orientation (Tracy & Robins, 2007d, p. 508). Hubristic pride on the other hand, is expected to be positively related to narcissism, shame, disagreeableness and non-conscientiousness (Tracy & Robins, 2007d, p. 508).

1.5.4 COMMITMENT

Commitment as the third construct in the present study is explained in terms of its role in the guidance of action, enhancement of self-understanding and constitution of identity (Lieberman, 1998, pp. 2, 5, 86). Substantive commitments in particular, are regarded as “fixed points” (Lieberman, 1998, p. 175) around which people structure a coherent story of their lives that is experienced as meaningful (Lieberman, 1998, p. 175). Commitments are characterised by their stability over time (unlike intentions, desires and policies) and are sensitive to the demands of consistency and coherency, because they often involve certain norms, beliefs, ideals and values (Lieberman, 1998, pp. 86, 88). Lieberman (1998, p. 5) defines commitment as an action-guiding force in terms of its stability over time and its capacity to be revised and reconsidered, as well as in terms of its relation to a person’s self-understanding and identity. In an interpersonal context, commitment refers to the intention to persist with romantic relations (Rusbult et al., 1998), and is defined in terms of its ability to foster satisfaction in relationships, the availability of the quality of alternatives and the strength of investments already made in a particular relationship (Le & Agnew, 2003, p. 38). Rusbult et al. (1998, p. 360) describe commitment as a psychological construct that exerts a direct influence on people’s everyday behaviour and on decisions to persist in a particular relationship. Rusbult et al. (1998, p. 358) specifically designed the Investment Model Scale to measure the four key predictors of persistence namely, commitment level and the levels of satisfaction, quality of alternatives and investment size as the three bases of dependence. Highly committed individuals are according to Rusbult et al. (1998, p. 360) more likely to persist in their relationships, compared to less committed individuals. Commitment is positively associated with the levels of satisfaction

and the size of investment, and negatively associated with the quality of alternatives (Rusbult et al., 1998, p. 360).

1.6 CONCEPTUAL FRAMEWORK

1.6.1 THE MEANING MAINTENANCE MODEL (MMM)

The conceptual framework of the present study is based on the Meaning Maintenance Model (MMM) of Heine et al. (2006). Meaning is the fundamental principle underpinning the MMM and is regarded as innately a basic human need, concretised through certain mental representations of expected relationships of the self. Camus (1955, as cited in Heine et al., 2006, p.89) argued that human beings are meaning-makers, continually identifying patterns and establishing, among others, connections and associations, and as such regarded *meaning* and *relation* as synonymous. In their role as meaning-makers humans are compelled to establish mental representations of expected relationships in three general domains wherein individuals attempt to create meaning frameworks namely, the self, the external world and the self in relation to the external world (Camus, 1995, as cited in Heine et al., p. 89; Heine et al., 2006, p. 90).

From the aforementioned discussion it can be concluded that meaning/meaningfulness of the self or identity is inherently related to identity constructs such as self-differentiation, pride and commitment. The outcome of the present study will hopefully enable the achievement of a better understanding of the similarities and differences between student commitment and student engagement in terms of the meaningfulness of the self or identity in personal and social contexts. A more detailed discussion of the study's conceptual framework is presented in Chapter 2, Section 2.2.

1.6.2 RELATION, REPRESENTATION AND REAFFIRMATION IN THE MMM

Heine et al. (2006) consider meaning, relation and association to be synonymous when they state that “meaning is what connects things to other things in expected ways” (Heine et al., 2006, p. 90). More specifically, they reason that meaning frameworks are created when stable, unified relations are achieved in three domains, namely 1) the external world, 2) the self, and 3) the self in relation to the external world (Heine et al., 2006, p. 90). Meaning in relation to the **external world** consists of the total beliefs and expectations (an imagined or assumed reality as opposed to existence in actuality) about the external world and reflects a fundamental need for certainty, order and predictability (Heine et al., 2006, p. 95).

The self in the MMM refers to all beliefs related to oneself and includes the expected relationships that unite oneself diachronically and synchronically (Heine et al., 2006, p. 90). Meaning in relation to the self is enhanced when people experience coherence and consistency which means “to be internally consistent, free of contradiction and devoid of dissonance” (Heine et al., 2006, p. 90). These are the very elements that Lieberman (1998) has argued to be important features of commitment. The self-differentiation construct in this study (Skowron & Friedlander, 1998, p. 235) is primarily located in this arm of the model. In the domain of the self and the domain of the self in relation to the external world, the self in the present study is expressed by the self-differentiation construct, particularly in respect of the ability to take a solid I-position (Skowron & Friedlander, 1998).

The self in relation to the external world emphasises the affiliative needs of human beings, thus the fundamental desire to belong and to form close and lasting relationships with others, for others to value them and for their actions to have expected and valued consequences. Meaning as an identity-related construct is a central aspect in the maintenance of meaningful human mental representations of expected relations and paradigms in order to regulate its perceptions of the self and of the world (Heine et al., 2006, p. 88). To experience self-conscious emotions such as pride, the individual must possess the capacity to form stable self-representations and to consciously reflect on those self-representations (Tracy & Robins, 2007f, p. 7). As such, the pride construct as a self-relevant emotion (Tangney, 2005) is located in this arm of the model (i.e., the meaningfulness of the self in relation to itself and to the external world), because it reflects an element of comparison of the self in relation to the external world. At times, it is also referred to as a moral emotion because it guides people’s behaviour in relation to norms and values acquired in their particular community. In addition, pride can lead to increased self-esteem which helps people to maintain viable meaning frameworks (Heine et al., 2006, p. 94). In the present study the assumption is that pride enhances self-esteem, reinforces meaningfulness and thereby has the potential to strengthen a person’s commitments.

I suggest that the construct of commitment is thought to straddle the three domains (i.e., the self, the external world and the self in relation to the external world) in which humans seek to achieve meaning. Commitment requires certain beliefs about the world (that the world is coherent and that one’s commitments can be expected to be rewarded), about the self (that one’s commitments are based on a self that is internally coherent and

consistent), and about the self in relation to the external world (that commitments come to reflect moral obligations to oneself and others, the sustainment/abandonment of which has moral consequences for the self and for one's relationships). It can thus be assumed that the establishment of authentic, long lasting commitments requires the input of a well differentiated self in terms of a solid/stable I-position (i.e., the domain of the self). The pride emotion possesses the capacity to foster prosocial behaviours and the maintenance of identity-related relationships and commitment investments that are experienced as meaningful (i.e., the domains of the self and the self in relation to the external world).

1.7 PARADIGMATIC PERSPECTIVE

The positivist paradigm that frames the research design of the present study is based on the theoretical viewpoints of Garratt (Crook & Garratt, 2011, p. 215), namely that positivism should be “logically defensible... (and)... practically feasible” (Crook & Garratt, 2011, p. 214) and that of Crook (Crook & Garratt, 2011, p. 215) arguing that “efforts to ensure accountability need not imply epistemological commitment to the belief that some absolute success or truth can be achieved in relation to reliability, validity, or generalisation” (Crook & Garratt, 2011, p. 215). A positivist paradigm in social science methodology emphasises confidence in the objectivity of a study. Researchers who adopt a positivist paradigm feel compelled to be accountable with respect to factors such as reliability and validity. According to Crook and Garratt (2011, p. 215) “the tradition of positivism, modified and re-appropriated, will continue to influence research design in contemporary social inquiry.”

The ontological and epistemological point of departure of the present study assumes a self that can be described objectively as a given human entity (Baumeister & Vohs, 2005, p. 197) that can be defined and whose current attitudes, beliefs, opinions and behaviours can be observed, measured, interpreted and predicted (Creswell, 2008a, p. 389). Taking a positivist stance, I assume that truth-statements reflect an objectively observable ontology (Clark, 1998, p. 1244).

1.8 RESEARCH QUESTIONS AND HYPOTHESES

1.8.1 PRIMARY RESEARCH QUESTION

What is the relationship between self-differentiation, pride and commitment in university students?

1.8.2 SECONDARY RESEARCH QUESTIONS

Subquestion 1:

How are self-differentiation, pride and commitment related in university students?

Subquestion 2:

Are demographic factors such as age, gender, home language, academic year of study and place of residence related to students' level of commitment?

Subquestion 3:

Are self-regulatory factors such as learner autonomy (study management, satisfaction with study course), resource allocation (study-time, social networking, job-involvement, family support) and goal-setting (learning and life goals), related to students' level of commitment?

1.8.3 RESEARCH HYPOTHESES

To examine the primary research question three sets of hypotheses with regard to the primary research question were formulated to investigate the relationships between self-differentiation, pride and commitment in a sample of undergraduate university students. The first set was formulated to test the linear correlational relationship between the variables in the present study and is related to subquestion 1. The hypotheses in the second set were formulated to compare the scale means of the various subgroups on demographical variables such as age, gender, home language, academic year of study and place of residence (subquestion 2). The third set of hypotheses consisted of a comparison of self-regulatory learner behaviours (preparedness for university studies, study management, learning and life goals, satisfaction with study course, social networking, part-time job, family support) in an academic context (subquestion 3).

1.8.3.1 Hypothesis 1: Correlations (Spearman's σ):

Null hypothesis: $\rho_{xy} = 0$

There is no relationship between Meaningfulness, Satisfaction, Quality of Alternatives, Investment Size, Commitment Level, Emotional Reactivity, Emotional Cutoff, I-position, Fusion with Others, Authentic Pride and Hubristic Pride.

Alternative hypothesis: $\rho_{xy} \neq 0$

There are statistically significant relationships between Meaningfulness, Satisfaction, Quality of Alternatives, Investment Size, Commitment Level, Emotional Reactivity, Emotional Cutoff, I-position, Fusion with Others, Authentic Pride and Hubristic Pride.

1.8.3.2 Hypothesis 2: Independence of samples:

Null hypothesis: $H_0 =: \mu = 0$

Subgroups in the present study will not differ significantly in terms of age, gender, home language, academic year of study and place of residence.

Alternative hypothesis: $H_0: \mu \neq 0$

Subgroups analysed in the present study will differ significantly in terms of age, gender, home language, academic year of study and place of residence.

1.8.3.3 Hypothesis 3: Analysis of variance:

Null hypothesis: $\mu_a = \mu_b = \mu_c$

Subgroups analysed in the present study will not differ significantly in terms of self-regulatory learning behaviours such as learner autonomy (preparedness for university studies, study management, satisfaction with study course), resource allocation (time allocation in terms of social networking, study-time, job-time, family support) and goal-setting (learning and life goals).

Alternative hypothesis:

Subgroups analysed in the present study will differ significantly in terms of self-regulatory learning behaviours such as learner autonomy (preparedness for university studies, study management, satisfaction with study course), resource allocation (social networking, study-time, job-time, family support) and goal-setting (learning and life goals).

1.9 RESEARCH DESIGN

1.9.1 Context of the research

The present study was conducted at a South African University, which composition of student representation in terms of culture and language has changed dramatically since

1994, particularly in respect of broadening access to black students (Jansen, 2004, p. 119). This specific higher education institution regards among others, diversity as one of its navigational markers and as such the rich cultural diversity of the South African population is reflected in its student population. In 2011 the total student population was 62 500 of which 54.9% was female and 45.9% black. In the same year the university had 18 000 distance education students of whom 4 000 were international students. Sixty seven percent of these international students came from Southern African Development Community Countries. In 2012 the total student population was 61 880 of whom 45 642 were contact students, 58% were female and 61% were black (2012 Annual Report). Lectures are presented in English or Afrikaans, while Sepedi is used as an additional language of communication.

1.9.2 Research methodology

A *quantitative research approach*, based on a positivist paradigm, was chosen to conduct the present study. A *correlational, cross-sectional research design* was employed to explore the assumed associations among the theoretical constructs, self-differentiation, pride and commitment (Mertens, 2010a, pp. 163, 171). However, since the research was designed as a correlational survey study, the establishment of “a definite cause-and-effect relationship” (Mertens, 2010e, p. 124) between the different variables under discussion was precluded. Analysis of these correlations is based on simple proportions and percentages only (Punch, 2009b, p. 223). Using the positivistic paradigm the goal was thus simply to explain the inter-correlational relatedness between self-differentiation, pride and commitment (Romani, Primecz & Topcu, 2011, p. 446).

A cross-sectional survey design was used to collect the data for both the pilot study and the main study. The data was collected to measure current attitudes, beliefs, opinions and practices of the participants (Creswell, 2008, p. 389). Participants’ attitudes, beliefs and opinions represent the ways how they feel about themselves and others, and how they think about various issues. Their practices represent their actual behaviours (Creswell, 2008, pp. 389-390). The data was collected by using a combined correlational survey questionnaire consisting of the different variables of the Differentiation of Self Inventory (DSI-R), the Authentic and Hubristic 7-Item Pride Scales (AHP) and the Academic Commitment Scale (ACS), an adapted version of the original Rusbult et al. (1998) Investment Model Scale (see Section 1.10.2 for a discussion on the instruments).

1.9.3 Research phases

The research was conducted in two phases. The first phase comprises the pilot study, scale adaptation in order to create a new scale with the view to measure academic commitment. The new Academic Commitment Scale (ACS) was adapted from the Rusbult et al. (1998) Investment Model Scale originally developed to measure commitment within romantic-oriented relationships. The aim of the pilot study was to determine the reliability and internal consistency of the adapted Academic Commitment Scale (ACS), the Differentiation of Self Inventory-Revised (DSI-R) and the Authentic and Hubristic 7-Item Pride Scales (AHP). Reliability and item-analysis were executed to this effect. Steps that were followed in the adaptation process of the Academic Commitment Scale (ACS), including the Self-differentiation Inventory (DSI-R) and Authentic and Hubristic Pride Scales (AHP), are discussed in Chapter 3.

The second phase of the study comprises the implementation of the main study in respect of the interrelatedness between self-differentiation, pride and commitment variables. The administration of the main study phase included the data collection and analyses processes. Reliability, item and factor analyses were conducted to determine the internal consistency and construct validity of the ACS, DSI-R and AHP and to assess the scale properties of the three scales. Descriptive statistics and the Shapiro-Wilk test were used to assess the normality of the distribution of scale scores. The main research question was answered by conducting correlational analyses (see Section 1.8.1). Subgroup analyses were applied to address the two secondary questions of the study (see Section 1.8.2). An overview of the two phases of the study is summarised in Figure 1.1 below.

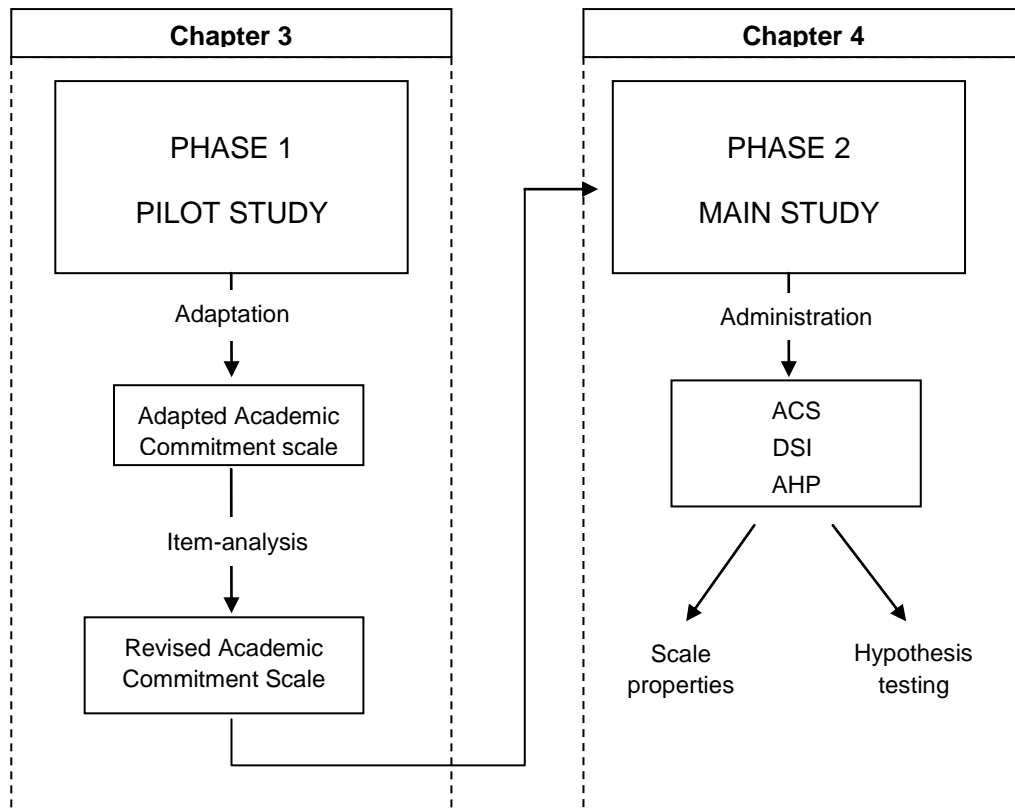


Figure 1.1 Overview of the study

1.10 DATA COLLECTION

1.10.1 SAMPLING

The sampling plan of a study generally fits the logic of the conceptual framework, the research questions and the hypotheses (Punch, 2009a, p. 252). The focus of the present study is mainly on correlations/associations between variables and thus a fairly large sample size was needed to achieve reliable and quantifiable results (Punch, 2009a, p. 252). A one-stage random cluster sampling procedure was used for both the pilot study and the main study, with a cluster representing undergraduate modules. Modules were drawn randomly until a satisfactory sample size had been achieved. As pointed out in Section 1.9.1 the researcher was unable to exercise control over the achievement of a representative sample in terms of gender and race/language/culture in these particular modules that were randomly chosen.

With regard to the distribution of the sample of the present study at this particular higher education institution, the field work processes were performed within two faculties. The pilot study was conducted in one specific faculty and 51 students, consisting of four male

and 47 female students, participated. The age of participants ranged from 19 to 36 years. The distribution of participants with regard to culture in terms of language was as follows: Afrikaans 51%, English 23.5%, African languages 21.5% and other 2%. Participants in the main study came from two different faculties. Two hundred and fifty nine students participated. The distribution with regard to culture/language was not representative: the overwhelming majority was Afrikaans, 47.5%, followed by English, 31.7%, African languages, 17.3% and other languages 3.5%. Participants were aged between 18 and 30 years (92% between 19 and 22 years). Male students represented 48% and females 52% of the sample. In respect of gender representation it must be noted that at the first faculty females were at large in the majority, whereas males dominate the number of participants at the other faculty.

In order to arrange for the collection of data at the two faculties heads of departments and lecturers involved in the randomly selected modules were approached for assistance to get access to the students. Questionnaires consisted of the three scales (see Section 1.10.2 below) were distributed among the students prior to the commencement of a lecture. Lecturing time was not compromised. The purpose of the study was explained to the students and they were informed that participation was voluntary and that they could turn down the invitation to participate (see Section 1.14 for a more detailed discussion on ethical considerations). The participants were told that they could complete the questionnaire in their own time. A box in front of the lecture room was made available wherein participants could place the questionnaires whether it was completed or not.

1.10.2 INSTRUMENTS

The Academic Commitment Scale (ACS), adapted from the original Rusbult et al. (1998) Investment Model Scale was used to measure commitment in an academic context. To measure the self-differentiation construct in the study the revised Differentiation of Self Inventory (DSI-R), developed by Skowron and Friedlander (1998) was administered to highlight identity-related aspects of the self. The Authentic and Hubristic 7-Item Pride Scales, developed by Tracy and Robins (2007d) were used to measure Pride as an identity construct in relation to the other two constructs in the study namely, self-differentiation and commitment.

1.10.2.1 The adapted Academic Commitment Scale (ACS)

The Rusbult et al. (1998) Investment Model Scale was originally developed to measure the level of commitment in romantic relationships. However, Le and Agnew (2003), who conducted a meta-analysis on commitment, found that the model of Rusbult et al. (1998) can be expanded to non-interpersonal domains such as commitment to one's job, hobbies, decision-making and institutional commitment, which may include higher education settings.

The Investment Model of Rusbult et al. (1998) was adapted to change the object of commitment with the view to reflect academic commitment. The wording of the original Investment Model was retained as far as possible. Although the original model is based on the assessment of commitment level in terms of romantic relationships on three levels of dependence, namely satisfaction, quality of alternatives and investment, it was decided to add meaningfulness as a fifth potential predictor of commitment in an academic context in view of the fact that literature indicated that commitment depends to a great extent on the meaningfulness of an identity (Demerath, 2006; Human-Vogel, 2008; Lieberman, 1998). Particularly, the predictive power of meaningfulness was assessed in combination with the commitment, self-differentiation and pride subscales. New items were formulated to establish the meaningfulness subscale so as to operationalise meaningfulness in terms of the extent to which students feel that their studies enable them to find fulfilment in their studies, as well as the extent to which they experience their studies as meaningful. A questionnaire was composed in which the five subscales of commitment (Meaningfulness, Satisfaction, Quality of Alternatives, Investment Size, Commitment Level), as well as the four subscales of self-differentiation (Emotional Reactivity, Emotional Cutoff, I-position, Fusion with Others) and the Authentic and Hubristic Pride scales were included.

Studies conducted by Rusbult et al. (1998) provide convincing evidence for the reliability and validity of the Investment Model Scale to measure commitment in interpersonal relationships. The instrument seems to be internally well structured and the items reveal good reliability with high item-total correlations and strong alpha coefficients ranging between $\alpha = .91$ to $.95$ for Commitment Level, $\alpha = .92$ to $.95$ for Satisfaction Level, $\alpha = .82$ to $.88$ for Quality of Alternatives and $\alpha = .82$ to $.84$ for Investment Size (Rusbult et.al., p. 368).

1.10.2.2 Differentiation of Self Inventory - Revised (DSI-R)

The original *Differentiation of Self Inventory (DSI)* was developed by Skowron and Friedlander (1998) as a multidimensional self-report instrument for measuring emotional reactivity (ER), I-position (IP), emotional cutoff (EC) and fusion with others (FO) in adults over 25 years of age. Because of generally lower reliability obtained for the fusion with others (FO) subscale, the scale was revised with a view to enhance the original FO subscale's internal consistency in terms of an emotional overinvolvement with others, heavy reliance on others in decision making and a lack of holding constant personal beliefs (Skowron & Schmitt, 2003, p. 214). The DSI-R contains 46 items, the majority of which are scored in the reverse order, with higher scores reflecting greater differentiation of self.

Cronbach's alpha for the DSI generally show high reliabilities for the full scale and the four subscales (Skowron and Friedlander, 1998), ranging from $\alpha = .88$ for the full scale, I-position $\alpha = .80$, emotional reactivity $\alpha = .83$, emotional cut-off $\alpha = .80$ and fusion with others $\alpha = .82$. For the revised scale, reliabilities of $\alpha = .92$ (full scale), $\alpha = .89$ (emotional reactivity), $\alpha = .81$ (I-position), $\alpha = .84$ (emotional cutoff) and $\alpha = .86$ (fusion with others) were obtained (Skowron & Schmitt, 2003, p. 209).

The results of Skowron and Schmitt (2003, p. 209) indicate that three of the subscales namely, Emotional Reactivity (ER), I-position (IP) and Emotional cutoff (EC) are theoretically sound, but that the Fusion with Others (FO) subscale was problematic in the developmental phase of the original DSI. However, a revised Fusion with Others (FO) subscale was included and results rendered improved internal consistency and construct validity (Skowron & Schmitt, 2003, p. 209). With regard to the construct validity of the DSI-R, intercorrelations among the subscales reported by Skowron and Schmitt (2003, p. 214), were low to moderate and varied between $r = .24$ to $.66$ ($p < .001$), indicating that all correlations were significant. The subscale-full scale correlations varied between $r = .62$ (EC) and $.86$ (ER), indicative of moderate to high correlations. Moderate, positive correlations between ER, IP and FO were reported, while relatively smaller correlations were found between EC and the other subscales.

The assessment of demographic differences in Skowron and Schmitt's (2003) study suggest statistically significant gender differences on the emotional reactivity and I-position subscales, with women generally displaying greater emotional reactivity and

more problems taking an I-position in relationships than their male counterparts. No significant differences in respect of age, income, marital status and ethnicity were reported.

1.10.2.3 The Authentic and Hubristic Pride Scales (AHP)

The Authentic and Hubristic Pride Scales were developed by Tracy and Robins (2007d) to demonstrate that the pride construct can be theoretically distinguished by two different facets, namely *Authentic* and *Hubristic Pride*. Alpha reliabilities for the Authentic Pride Scale and the Hubristic Pride Scale in respect of trait pride ranged from $\alpha = .88$ for authentic pride and $\alpha = .90$ for hubristic pride respectively (Tracy & Robins, 2007d, p. 520). For the second sample (state pride) the reliabilities for the authentic pride scale ranged from $\alpha = .88$ and $\alpha = .90$ for hubristic pride respectively. These alphas confirmed the internal consistency of the two scales and showed that trait pride and state pride had no significant effect on the assessment of the pride emotion.

With regard to the construct validity of the Authentic and Hubristic Pride Scales (AHP), two distinct factors emerged from the scree test (Tracy & Robins, 2007d, p.520). The results of confirmatory factor analysis (CFA) also support a clean two-factor structure (Tracy & Robins, 2007d, p. 520).

In respect of gender it was found that men scored higher than women on the hubristic pride scale, whereas in authentic pride there were no gender differences indicated in both samples for men and women (Tracy & Robins, 2007d, p. 520).

1.11 DATA ANALYSIS

The SPSS software was used to compute the collected data. The interpretation of the data was conducted by the researcher himself.

1.11.1 RELIABILITY AND VALIDITY

Reliability and validity of new instruments and instruments used in a different context than the original context always have to be established (Burton & Mazerolle, 2011, p. 28). The reliability of an instrument gives an indication of its consistency and repeatability, whereas validation of the instrument is aimed at determining whether it is able to measure the constructs that it is intended to measure (Burton & Mazerolle, 2011, p. 28).

An item-analysis using Cronbach's alpha coefficient was conducted to determine the internal consistency of all the scales in the study. The corrected item-total correlation matrix was inspected and items with low corrected item-total correlations were removed. Item loadings less than .30 was considered for removal, whereas items with cross-loadings greater than .50 were retained (Burton & Mazerolle, 2011, p. 33).

1.11.2 EXPLORATORY FACTOR ANALYSIS

Exploratory Factor Analysis (EFA) was used to examine the construct validity of all the scales in the present study, with a particular focus on the new Academic Commitment Scale (ACS) (Burton & Mazerolle, 2011; Fabrigar & Wegener, 2012). The objective of EFA is to find the most parsimonious representation of the pattern of associations among items that reflects the assumed underlying structure of correlations/associations of data as proposed theoretically (Burton & Mazerolle, 2011, p. 30; Fabrigar & Wegener, 2012, pp. 1, 20). Exploratory Factor Analysis was therefore used to investigate construct-related evidence for the Academic Commitment Scale (ACS) which was adapted from the original Rusbult et al. (1998) scale.

Following the recommendations of Burton and Mazerolle (2011, pp. 29-30) the most important steps to be considered in the Exploratory Factor Analysis (EFA) are discussed briefly in the next section.

1.11.2.1 Sample size and sampling adequacy

Sample size is an important consideration in EFA (Burton & Mazerolle, 2011, p. 33) because it affects the stability of the factor analytic solution. Various recommendations about sample size have been reported in the literature, many of which do not necessarily take the properties of the data into account (Fabrigar & Wegener, 2012, p. 26). For example, researchers commonly use the recommendation of at least 10 respondents per survey item or 300 respondents even though it has been found to be inaccurate (Burton & Mazerolle, 2011, pp. 29, 33; Cabrera-Nguyen, 2010, p. 101; Fabrigar & Wegener, 2012, p. 26).

In the present study, I aligned myself with Fabrigar and Wegener's (2012, p. 26) recommendation that reasonable results can be achieved with relatively small samples (sample size = 100) provided that communalities are $> .70$ and that the instrument contains at least 3 to 5 items per construct. Thus, a sample of at least 200 is required

when communalities are expected to be moderately good, i.e., .40 to .70, which means that at least 3 item scores must load on each construct. Given Fabrigar and Wegener's (2012) recommendation to plan for moderate conditions, I therefore sampled clusters until I obtained a minimum sample of 200.

Other factors that were taken into account when determining the suitability of the data for factor analysis included measures of sampling adequacy such as the Kaiser-Meyer-Olkin (KMO) measure and Bartlett's test of sphericity (Burton & Mazerolle, 2011, p. 31). The KMO measures of sampling adequacy indicate the extent to which an item is correlated with the other items in the EFA correlation matrix. KMO correlations higher than .60 to .70 are regarded as an indication that the correlation matrix can be analysed (Burton & Mazerolle, 2011, p. 31). Bartlett's test of sphericity is a chi-square test that assesses whether the correlation matrix is an identity matrix. A significant result indicates that the matrix can be factor-analysed (Burton & Mazerolle, 2011, p. 31).

1.11.2.2 Determining the number of common factors

Seeing that a perfect representation of the data is not feasible, the objective of EFA in the present study was to find the most parsimonious model to approximate the pattern of correlation among the different variables. Fabrigar and Wegener (2012, p. 54) describe a parsimonious model as a model that 1) accounts for the correlations among the measured variables, 2) in which fewer common factors would do substantially worse to explain the variance, 3) in which one more common factor would not do substantially better in explaining the variance and, 4) in which all the common factors should be readily interpretable and related to the constructs of the domain of interest.

As Burton and Mazerolle (2011, p. 31) point out, the primary goal of factor identification is to ascertain the number of factors that best explain the underlying latent constructs. Several approaches can be used to determine the number of factors to retain, such as the Kaiser criterion (Eigenvalue >1 rule), Cattell criterion (scree plot) and more recently, a more objective method called parallel analysis (Burton & Mazerolle, 2011, p. 32). I aligned myself with Fabrigar and Wegener's approach (2012, p. 55) and I adopted a holistic approach by using a combination of subjective procedures. These procedures included Kaiser criterion (Eigenvalue >1), Cattell Scree Test and more objective procedures such as parallel analysis to provide more credibility to the analytical processes (Burton &

Mazerolle, 2011, p. 32; Fabrigar & Wegener, 2012, pp. 55-61), and to assess the extent to which solutions converged using different methods.

In sum, the first step consisted of an examination of the initial eigenvalues (Kaiser-criterion) to assess how many factors can be extracted with eigenvalues greater than one. The Scree Test was then used to assess the number of eigenvalues preceding the point where the curve begins to flatten. Finally, parallel analysis was used to compare the initial eigenvalues of the real data with the corresponding eigenvalues from a random data set with the same sample size and number of variables. To assess how well the factor solution fitted the pattern of correlations in the data, I made use of two model-fit indices as recommended by Fabrigar and Wegener (2012). The first involves calculating the root mean square error of approximation (RMSEA) based on the output of the chi-square goodness-of-fit-test. The RMSEA values were obtained by calculating it from the chi-square value. The following equation was obtained from Fabrigar and Wegener (2012) to calculate the root mean square error of approximation:

Equation

$$RMSEA = \sqrt{\frac{(\chi^2/df) - 1}{(n-1)}}$$

According to Fabrigar and Wegener (2012, p. 63) an RMSEA value of $\leq .08$ can be regarded as a reasonable standard for an acceptable model fit whereas a model with a close fit should have an RMSEA value of $\leq .05$.

1.11.2.3 Rotation of factors

In addition to decisions related to the number of factors to extract, I also decided on a rotational method in order to make the pattern of correlations among factors more interpretable (Fabrigar & Wegener, 2012). In the present study I used a maximum likelihood estimation model with promax rotation (MLE). Oblique rotational methods are appropriate when the factors underlying the collected data can be expected to be correlated and should remain correlated during the whole analytical process (Burton & Mazerolle, 2011, p. 31; Fabrigar & Wegener, 2012, pp. 74-75). An oblique rotation method allows the angle between the axes in the geometric representation of the data in the EFA to be altered (less than 90°) in order to achieve a more simple structure for the scale.

1.11.3 DISTRIBUTION OF SCALE SCORES

Since the distribution of most of the subscale scores turned out to be abnormal, I decided to use nonparametric statistical procedures to analyse the distributions of scale scores and correlations between the scales. The Spearman (*rho*) rank correlation coefficient (*rs*) as a nonparametric measure of association was used to measure correlations between the subscales (Siegel, 1956, p. 202). The Shapiro-Wilk (Razali & Wah, 2011) one-sample test was used to measure the normality of the distribution of scale scores. With reference to the measurement of differences between the means of groups the Mann-Whitney U-Test for two groups and Kruskal-Wallis (Pallant, 2011) for three groups or more were used.

In addition, the maximum likelihood (ML) procedure of extraction should also include the normality assumptions about the distribution of the measured variables. To determine the varying levels of normality Fabrigar and Wegener (2012, p. 99) recommend that an absolute skewness value of ≥ 2 and a kurtosis value of ≥ 7 can be considered as substantial deviations from normal ML parameter estimates. Thus, when the skewness and kurtosis values of a particular set of measured variables are substantially lower than the above guidelines they should not be problematic. Fabrigar and Wegener (2012, pp. 99-100) refer to three procedures to rectify severe levels of non-normality in parameter estimates, 1) to aggregate a number of scores, 2) to linearly transform the scores or 3) to conduct a model fit procedure that does not require multivariate normality. The Shapiro-Wilk (Razali & Wah, 2011) and Kolmogorov-Smirnov (Shapiro & Wah, 2011; Siegel, 1956, pp. 47-48) one-sample tests were utilised to establish the goodness of fit of the model in terms of the distribution of the sample data. The aim was to determine whether the observations obtained from the present study's sample could be reasonably expected coming from a random sample representing the theoretical distribution.

1.12 POSSIBLE CONTRIBUTION OF THE STUDY

It is anticipated that the results of the present study will contribute to the broadening of the literature on the theory of academic commitment in respect of the development of a new survey instrument, as an adaptation of the Rusbult et al. (1998) Investment Model, particularly aimed at measuring academic commitment in a higher education setting. Seeing that the present study was conducted within the framework of the Meaning Maintenance Model (MMM) of Heine et al. (2006), which is based on meaning as a

theoretical, psychological construct, Meaningfulness as a new subscale was added to the adapted version of the investment model in combination with Satisfaction, Quality of Alternatives and Investment Size. The hope is expressed that meaningfulness will provide additional strength to the predictive power of the adapted investment model scale in academic contexts. Research on commitment may also in particular benefit by the perspective provided by the present study that commitment is essentially identity-level self-regulation (Human-Vogel, 2013). Furthermore, the theoretical basis of commitment could also be enriched by studying commitment in relation to self-differentiation in respect of the capacity of the I-position (future-orientation, coherency and consistency) (Lord et al.; 2010; Skowron & Friedlander, 1998) to exercise an influence on identity-level self-regulatory commitment (Human-Vogel, 2013) in a higher education setting. Pride as a positive affective state displays the potential to mediate motivation and perseverance in self-regulatory learner commitment (Williams & DeSteno, 2009). The present study therefore can contribute to a better understanding of why some students persist with their studies, whereas others experienced problems in handling higher education stress and thus tend to seek alternative options.

The outcome of the study may also have practical implications for higher education authorities with regard to policy-making in respect of the development of, for example, support programs. Lecturers, students, educationists and psychologists may also benefit from the findings of the study in the sense that it may lead to a better understanding of why some students are able to commit, whereas others seem to struggle to cope with academic challenges and learning related stress.

1.13 LIMITATIONS OF THE STUDY

The findings of the present study are mainly based on quantitative methodological methods and the results were not compared with the actual academic records of the students and as such cannot be generalised to the population. With regard to gender the variables could be confounded due to the fact that the questionnaire was conducted at two different faculties of the same university. The two samples may thus not be balanced in respect of gender and culture representation in the different samples.

1.14 ETHICAL CONSIDERATIONS

1.14.1 ETHICAL CLEARANCE

The study received ethical clearance from the Ethics Committee of the Faculty of Education prior to the commencement of data collection. The researcher complied with the code of ethics particularly in terms of professional standards such as integrity, quality of research work, accountability and respect for the person and rights of participants. The participants' autonomy and right to self-determination were recognised and no undue pressure was applied on students to persuade them to participate in the research program.

1.14.2 VOLUNTARY PARTICIPATION AND INFORMED CONSENT

After ethical clearance has been granted lecturers were approached to obtain their permission and cooperation to arrange a meeting with the different groups of students as potential participants. The researcher provided the assurance that lecturing time would not be compromised. Students were addressed in a frank and honest way in order to provide them with full and accountable information about the nature and the purpose of the research. Full information implies that any reasonable and foreseeable aspect that might have an influence on their decision whether or not to participate in the study was clearly explained to them. Students were informed that participation in the survey is completely voluntary, that their human rights to personal autonomy and self-determination would be respected and that they would have the freedom to withdraw at any point in time with no adverse consequences. In an effort to obtain their consent to participate no unwarranted pressure was exercised upon students in an attempt to influence their decisions whether to participate or not. Copies of the questionnaires consisting of the ACS, DSI-R and AHP scales were distributed for completion on a voluntary basis. In addition, a covering letter was attached to the questionnaire including, among others, an explanation of the research purpose, information about possible risks to participants and how anonymity and confidentiality would be ensured. A statement that participation is completely voluntary and that refusal to participate will not result in penalties and that they could exercise the right to withdraw from the study at any point of time was also included. The name, telephone number and the e-mail address of the researcher were provided in the covering letter in the event that further information might be required (Babbie, 2005,

pp. 62-63; Gregory, 2003, pp. 36-41; Mertens, 2010c, pp. 335-340; Punch, 2009c, pp. 49-53).

1.14.3 PROTECTION FROM HARM AND RISK

Although it was not foreseen that participation in the study would have any significant negative effects on the students the researcher acknowledged the fact that studies involving humans run the risk of harming or affecting subjects in some way, regardless of whether they volunteer to participate or not. The questionnaire that was administered in the proposed study might have expose participants to questions that could inevitably impact on their emotional life, especially in terms of their self-esteem. They were confronted with questions that could evoke unpleasant thoughts and feelings. Participants were also expected to reveal personal characteristics, attitudes, opinions and behaviours that could be potentially demeaning or by revealing such information could make them feel slightly uncomfortable. It was possible that a fragile self-esteem could be harmed or negatively affected by some probing questions, e.g., revealing personal information that could be embarrassing to participants or some questions could force them to face aspects of themselves that they did not normally consider. Another possible source of harm to participants was embedded in the strategies for the analysis, reporting and dissemination of data (Babbie, 2005, pp. 63-64; Mertens, 2010c, pp. 338-339; Punch, 2009c, p. 50).

To counter any adverse effects as far as possible the researcher was sensitive to the issue of participant protection and therefore every effort was made to constitute a relationship with the participants based on honesty, trust and respect (Punch, 2009c, p. 50). The researcher made sure that students considering participation would have a clear understanding of the possible risks involved (Babbie, 2005, p. 64; Mertens, 2010c, pp. 338-339; Punch, 2009c, p. 50). Prospective participants were invited to ask questions in person or if there was uncertainty or doubt about the risk issue, they were encouraged to contact the researcher via telephone or e-mail. Debriefing sessions were offered to participants with the view to clear up any misconceptions or to work through unpleasant experiences that might occur during the survey process. In addition, the protection of participants was further safeguarded by the evaluative and monitoring function of the supervisor and the Faculty of Education's Ethics Committee in accordance with the ethical policy of this particular university.

1.14.4 PRIVACY, CONFIDENTIALITY AND ANONYMITY

In seeking the informed consent of prospective participants the researcher was cognisant of the importance of the participant's right to privacy, including the right to self-determination, and autonomy, as well as respect for human dignity. It is acknowledged that some thoughts, feelings, attitudes, personal views and opinions, especially opinions about the inner self, are private to participants in question and entering this domain of essentially private concerns could only be justified on the grounds of their informed consent. To enable them to open up and to share some part of their lives, the researcher attempted to establish a relationship with the participants build on openness, honesty, confidence and trustworthiness (Gregory, 2003, p. 41).

In order to encourage students to reveal and share their real feelings, thoughts, opinions and attitudes they were assured that the risk to participate in this study is minimal and confidentiality would be guaranteed. The researcher was fully aware of the fact that such a guarantee required the obligation to uphold the given assurance. Information revealed in confidence would not be revealed to others and participants were reassured that any confidential information and collected data would be used for academic/thesis purposes only (Babbie, 2005, p. 65; Gregory, 2003, p.50; Mertens, 2010c, p. 339; Punch, 2009c, p. 50).

Data collection was conducted in an anonymous way which means that no names or student numbers were used. The research design in terms of participant selection, the sampling process and collection of data did not require a list of names with the effect that participants could not be identified by their names (Babbie, 2005, p. 64; Mertens, 2010c, p. 340; Punch, 2009c, p. 50) or student numbers. The combined Questionnaire made provision for general particulars such as gender, age, language and level of education, which were used in the analysis phase of the study only.

1.15 CONCLUSION

Chapter 1 provided an overview of the present study. I proposed that identity-related factors are functionally crucial to the prediction of commitment of undergraduate university students. The study focuses in particular on the contribution of identity-related factors to self-regulatory commitment in learning contexts in terms of identity-level self-regulation. Commitment in an academic context in terms of identity-level self-regulation also seems to be based on a future perspective as well as on coherency and consistency in self-

construals (Human-Vogel, 2013). I also have argued that cross-cultural contact between students exercised a significant influence on the identity-formation of participants at this particular university in terms of their experiences of the self and emotional investments in academic context. Self-differentiation and the self-relevant emotion pride were identified as identity-related constructs with the potential to foster students' commitment to their studies. It is posited that the interrelationship between commitment and its correlates self-differentiation and pride may exercise a significant influence on academic commitment. It is further assumed that commitment in an academic domain may be depended on the extent to which students experience their academic activities and adjustment to university life as satisfactory and meaningful in terms of sustainable, identity-related investments. In order to explore the formulated research questions and hypotheses in the present study in respect of the interrelationships between the aforementioned constructs, a quantitative research design against the background of a positivist paradigmatic perspective was used. In Chapter 2 the theoretical assumptions underpinning the present study are outlined in the conceptual framework, based on the Meaning Maintenance Model (MMM) of Heine et al. (2006). The exploration of applicable literature on self-differentiation, pride and commitment in terms of academic contexts are also discussed in the next chapter.

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CHAPTER 2

INTRAPERSONAL CORRELATES OF COMMITMENT:

SELF-DIFFERENTIATION AND PRIDE

CONCEPTUAL FRAMEWORK

2.1 INTRODUCTION

In Chapter 1 I reasoned that identity related factors such as self-differentiation and self-relevant emotions, for example, pride, are theoretically significant for substantive academic commitment. I pointed out that self-differentiation involves the ability to balance the forces of togetherness and autonomy in emotionally committed relationships (Skowron & Friedlander, 1998, p. 235; Skowron & Dendy, 2004, p. 337; Skowron, Holmes & Sabatelli, 2003, p. 124). As a self-relevant emotion, pride is central to the constitution of a “motivational sense of self” (Woodruff & Shallert, 2008, p. 53), which is also an important aspect of self-differentiation and commitment. Pride can influence moral choice and moral behaviour (Tangney et al., 2007b, p. 347) and enhance perseverance in commitments (Williams & DeSteno, 2008, p. 1007). Substantive commitments involve norms, ideals and values and are sensitive to the demands of identity consistency and coherency (Lieberman, 1998, p. 88), which is why I argue that self-differentiation, pride and self-regulation are relevant for the study of commitment.

In the present chapter I am examining the literature on self-differentiation, pride, and commitment to illuminate the hypothesised relationships between them. The conceptual framework of the present study, namely the Meaning Maintenance Model (Heine et al., 2006) is discussed next.

2.2 CONCEPTUAL FRAMEWORK

2.2.1 THE MEANING MAINTENANCE MODEL (MMM)

As discussed in Chapter 1, Section 1.6.1.I the Meaning Maintenance Model (MMM) as proposed by Heine et al. (2006), was selected as the conceptual framework to guide the study of interrelationships between self-differentiation, pride and commitment. The MMM is based on the principle that people have a basic need for meaning and as such is described as “inexhaustible meaning makers” (Heine et al., 2006, p. 91) who continuously

attempt to establish coherent relations within the self, the external world and the self in relation to the external world (Heine et al., 2006, pp. 90-91). The MMM is relevant to the present study because it facilitates the integration of diverse literatures that deal with meaning-related issues (Heine et al., 2006, p. 89). *Meaning* refers to the aspects that connect people, places, objects and ideas to one another “in expected and predictable ways” (Heine et al., 2006, p. 89). Camus (1955, as cited in Heine et al., 2006, p. 89) expressed the opinion that all cultural endeavours originated from the universal human need to relate elements of a perceived reality, in respect of expected relations, into a single, united and cohesive framework. As meaning-makers humans are compelled to identify and create, among others, patterns, connections and associations in relation to the self and the self in relation to the external world (Camus, 1955, as cited in Heine et al., 2006, p. 89). Heine et al. (2006) assert that “meaning is what connects people to the things that lie beyond the self: the people, places, and things that surround them” (Heine et al., 2006, p. 90). From a Western point of view meaning and relation are regarded as synonymous and people consequently establish mental representations of expected relationships within the self in relation to the external world (Heine et al., 2006, p.89). Therefore, people continuously attempt to bind elements of the self to elements of their external world (Heine et al., 2006, p. 89). Demerath (2006, pp. 493, 512) likewise argues that a sense of *meaningfulness* enables people to come to a better understanding of their relatedness to objects, others, the world and their selves. Meaning thus refers to relations that are experienced as meaningful, which is, according to Lieberman (1998) important for commitment. When disruptions to meaning frameworks occur people are driven to reaffirm alternative frameworks in order to re-establish a sense of normality and coherence in their lives (Heine et al., 2006, pp. 89-90). Meaning or meaningfulness is central to the execution of the present study because commitment to the self or identity depends on the meaningfulness of a particular identity (Demerath, 2006, p. 493). It thus can be concluded that meaning also represents a core aspect of the self-differentiation, pride and commitment constructs because they are related to identity. Aspects regarding relation, representation and reaffirmation in the Meaning Maintenance Model (MMM) are discussed next, followed by discussions in respect of the location of self-differentiation, pride and commitment in the MMM respectively.

2.2.2 RELATION, REPRESENTATION, REAFFIRMATION IN THE MMM

As discussed in Section 2.2.1 Camus (1955, as cited in Heine et al., 2006, pp. 89-90) referred to the Western-oriented perception that meaning and relation are synonymous,

and therefore “meaning is relation” (Heine et al., 2006, p. 89). Meaning represents expected relationships and associations that people continuously construct and impose on their worlds (Heine et al., 2006, p. 90). According to Heine et al. (2006, pp. 89-90) people continuously pursue and construct coherent relationships within the external world, within the self and within the self in relation to the external world. In this regard Heine et al. (2006, p. 90) argue that the most important relationships are those that are established between the self and the external world through mental representations of expected relations. Perceived breakdowns in these mental representations provoke the strongest efforts to reconstruct meaningful relationships (Heine et al., 2006, p. 90). When people’s meaning frameworks are disrupted they tend to respond by reaffirming frameworks that have remained intact or alternatively they pursue frameworks in domains that are more easily accessible (Heine et al., 2006, p. 90).

Meaning in relation to the **external world** comprises expected and comprehensive relationships that constitute the external environment in terms of an imagined or assumed reality as opposed to existence in reality (Heine et al., 2006, p. 90). They include the full range of beliefs and expectations about the external world that are related to other constructs such as, among others, just-world beliefs (Dalbert, 1999, p. 92), as well as a sense of coherence that particularly reflect the fundamental need for certainty, orderliness and predictability (Antonovsky & Sagy, 1986, p. 214). Certainty, according to Heine et al. (2006, p. 96) refers to a sense that a reliable framework of relations between themselves and their worlds has been generated through meaning, so that people come to the belief that they understand the operations of their world and their place within the world. A sense of certainty also allows people to perceive their world in a more orderly manner, and if the mental representations of expected relationships are internally consistent and in line with perceptions, certainty will allow people to satisfy their desire for predictability and control (Heine et al., 2006, pp. 95-96), thereby enhancing the experience of meaning.

The Self in relation to the external world emphasises the affiliative needs of humans (Heine et al., 2006) which are expressed by the fundamental desire to belong and to form close and lasting, meaningful relationships with others, in order to be valued by others with the expectation that their actions will produce valued consequences (Heine et al., 2006, p. 96). The nature of commitment implies an expectation that commitment will produce valid positive consequences when one adheres to personal convictions under undue pressure (Skowron & Friedlander, 1998, p. 235). In addition, the need to belong is also manifested in the desire to belong to “a cohesive social unit” (Heine et al., 2006, p.

96), individual or collective cultures, that can be contrasted against other groups (Heine et al., 2006, p. 96). The motivation to constitute a sense of belongingness and a sense of (group) identity is fundamentally grounded in the human need for affiliation (Heine et al., 2006, p. 98). According to the MMM meaning in interpersonal relationships allows people to access or gauge the level of their social functioning, which provides them with a sense that they can predict and control their worlds (Heine et al., 2006, p. 97).

2.2.3 SELF-DIFFERENTIATION IN RELATION TO THE MMM

People are generally motivated to remain the “same” person over time, despite enacting different roles in their lives. They prefer to have freely chosen behaviours, actions, beliefs and perceptions about themselves that make sense (Heine et al., 2006, p. 90). Meaning in relation to the self is also, to a large extent, dependent on the infusion of evaluative beliefs into the process of constituting and developing “a coherent self-conception” (Lieberman, 1998, pp. 143, 175). We can conclude that people’s self-governing mental representations of expected relations within the self ensure a stable and strong self that is experienced as meaningful (Heine et al., 2006, p. 90). Differentiation of self plays an important role in the MMM in the sense that it provides the self with stability by balancing the intellectual and emotional functioning and autonomy in interpersonal relationships (Skowron & Friedlander, 1998, p. 235).

Coherency and *consistency* feature prominently in both the MMM (Heine et al., 2006) and in Lieberman’s (1998) moral perspective on commitment, as they constitute the vital elements needed for relationships to be experienced as meaningful. A personal belief in a just world may impact positively on the self and self-perceptions, and in reality constitutes a “contract” between the self and the self’s social world, which includes a mutual obligation to strive for justice with one’s own actions and with the expectation to be treated fairly by others. In addition, a sense of coherency reflects the “feeling of confidence that one’s internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected” (Antonovsky & Sagy, 1986, p. 214). When life experiences are characterised by consistency and participation, people generally experience themselves as coherent and predictable (Antonovsky & Sagy, 1986, p. 214). People who are able to persist with commitments are experienced by others as coherent and predictable in their behaviour. The involvement of a sense of differentiation of self in interpersonal/social meaning relationships reflects the capacity of the self to achieve a clear and coherent sense of self

in emotional relationships with important others in terms of personal and impersonal values and beliefs (Lieberman, 1998, pp. 143, 173; Skowron & Friedlander, 1998, p. 237).

In the domain of the self and the domain of the self in relation to the external world, the self in the present study is expressed by the self-differentiation construct, particularly in respect of the ability to take a solid I-position (Skowron & Friedlander, 1998). More differentiated individuals demonstrate a clear sense of self (I-position) and are psychologically well equipped to balance emotional and intellectual functioning, while still able to maintain a sense of intimacy and autonomy (independence from others) in relationships (Bowen, 1978, as cited in Skowron & Friedlander, 1998, p. 235).

2.2.4 PRIDE IN RELATION TO THE MMM

Meaning as an identity-related construct is central to the maintenance of meaningful human mental representations of expected relations and paradigms in order to regulate its perceptions of the self and of the world (Heine et al., 2006, p. 88). To experience self-conscious emotions such as pride, the individual must possess the capacity to form stable self-representations and to consciously reflect on those self-representations (Tracy & Robins, 2007f, p. 7). Self-awareness and self-reflection are processes meant to mediate or regulate the relations between social evaluation and pride as a self-relevant emotion (i.e., between the self and the self in relation to the external world as proposed in the MMM). Pride is a self-relevant emotion that people generally experience in social contexts, and it is evoked by a sense of self-awareness and self-representations or mental representations that constitute identity (Tracy & Robins, 2007f, p. 5). Apart from the cognitive contents of the personal self, pride self-representations include relational, social and collective self-representations that are aimed at promoting social goals, such as the attainment and enhancement of status or the prevention of rejection (Tracy & Robins, 2007f, p. 6).

Pride serves to inform individuals as well as their social group of their achievements, and can lead to higher status and group acceptance (Tracy & Robins, 2007b, p. 278). The socially-directed pride construct can contribute to the enhancement of self-worth and self-esteem. Healthy self-esteem empowers people to maintain a viable meaning framework (Heine et al., 2006, p. 94). As a moral emotion, pride promotes self-worth, and also encourages and guides future behaviour in accordance with standards that are socially acceptable and worthy to adhere to (Tangney et al., 2007b, p. 360). Persistence in

commitments can enhance feelings of pride in terms of an obligation to honour decisions in relation to commitment. Abandoning a commitment can be detrimental to the self as adhering to a commitment is related to honouring such a commitment. In addition, pride in one's successes and in one's relationships, is likely to promote future behaviours in the achievement domain (Tracy & Robins, 2007b, p. 264).

The MMM (Heine et al., 2006) posits that people possess the capacity to identify and construct mental representations of expected meaning relationships and also the ability to reflect on those particular representations. As such, the pride construct as a self-relevant emotion (Tangney, 2005) is located in this arm of the model (i.e., the meaningfulness of the self in relation to the external world), because it reflects an element of comparison of the self in relation to the external world. At times, it is also referred to as a moral emotion because it guides people's behaviour in relation to norms and values acquired in their particular community. In addition, pride can lead to increased self-esteem which helps people to maintain viable meaning frameworks (Heine et al., 2006, p. 94). In the present study the assumption is that pride enhances self-esteem, reinforces meaningfulness and thereby has the potential to strengthen a person's commitments.

2.2.5 COMMITMENT AND ITS CORRELATES SELF-DIFFERENTIATION AND PRIDE IN RELATION TO THE MMM

In the present study, I argue that commitment is related to self-differentiation and pride, because commitment, self-differentiation and pride require certain beliefs about the self, the external world and the self in relation to the external world (Heine et al., 2006, p. 90; Lieberman, 1998). I am in agreement with Lieberman's (1998, p. 143) argument that self-understanding requires the presence of values and evaluative beliefs if a coherent self-conception is to develop. Thus, stable and lasting commitments require a consideration of the role of identity. Meaningful commitments depend on a differentiated self (Skowron & Friedlander, 1998) that is experienced as internally coherent and consistent (Lieberman, 1998). As argued previously, commitments reflect moral obligations to the self, to others and to the external world, and therefore pride can also act as a motivator, capable of reinforcing and rewarding people's commitments (Tangney et al., 2007b, p. 360).

In the context of the Meaning Maintenance Model (MMM), a differentiated self is compelled to establish mental representations of expected relationships. Commitment in interaction with self-differentiation and pride evolves as manifestations of particular

meaningful mental representations. These mental representations of expected relations are aimed to connect the elements of the self and elements of the external world to the self, and ultimately bind the self to the external world in a meaningful way (Heine et al., 2006, p. 89). When people are confronted with meaninglessness in relationships, disruptions of their meaning frameworks are likely to occur. In this case people will seek to reconstruct a sense of meaning by reaffirming alternative frameworks, in particular those that are easy to access (Heine et al., 2006, p. 90). People may, for example, recapture some of their affiliative needs by simply replacing the existing relationship with another (Heine et al., 2006, p. 96). Consequently, the level of commitment will accordingly be negatively influenced in terms of the quality of alternatives (Rusbult et al., 1998), when the individual, as a result of dissatisfaction or incompetence in the current relationship, desires an alternative. On the other hand, the individual may weigh his/her options and alternatively decide on reparative action to reaffirm meaning and satisfaction in the existing relationship. Pride, as an anticipatory emotion, can have a positive effect on the restoration of meaning in relationships. In the event of a disruption of commitment behaviours, pride can motivate or mediate subsequent behaviours such as altruism, reparation or defensiveness (Tangney et al., 2007a, p. 31). Furthermore, the sustainment or abandonment of commitments will most likely have moral consequences for the self and one's relationships in respect of experiences of meaningfulness or meaninglessness respectively.

In sum, it can be assumed that the establishment of authentic, long lasting commitments requires the input of a well differentiated self in terms of a solid/stable I-position. The pride emotion possesses the capacity to foster prosocial behaviours and the maintenance of relationships and identity-related meaningful commitment investments. Furthermore, when individuals experience an ego-threat or when confronted with meaninglessness, they tend to react by reaffirming alternative meaning frameworks, usually in domains other than the domain under threat and in domains that are more easily accessible (Heine et al., 2006, p. 90). Less committed individuals who are dissatisfied with their particular relationship and who are experiencing the relationship as meaningless, will most likely revert to a domain where tempting alternatives are available (Rusbult et al., 1998, p. 361). Highly committed individuals on the other hand, who are satisfied with the relationship and experience the relationship as meaningful, will most likely be willing to contribute large investments to the relationship and thus be willing to persist with commitment to the relationship (Rusbult et al., 1998, p. 361).

Self-differentiation, pride and commitment as identity-related constructs will be discussed next in greater detail.

2.3 SELF-DIFFERENTIATION

2.3.1 INTRODUCTION

From a family therapy perspective, Bowen (1978, as cited in Skowron & Friedlander, 1998, p. 235) considered self-differentiation as a critical personality variable that is functionally involved in developing and attaining psychological health and well-being (Skowron & Friedlander, 1998, p. 235). Skowron and Friedlander (1998) define self-differentiation as the degree to which people can balance their emotional and intellectual functioning, as well as intimacy and autonomy in relationships (Skowron & Friedlander, 1998, p. 235). In particular, the “thinking-feeling and separateness-togetherness” (Skowron & Friedlander, 1998, p. 236) dimensions of a sense of self are actualised on intrapsychic and interpersonal levels respectively (Skowron & Friedlander, 1998, p. 236). Self-differentiation on an intrapsychic level refers to an individual’s choice to behave rationally and thoughtfully versus succumbing to emotionally guided behaviours (Skowron & Friedlander, 1998, p. 235).

Self-differentiation in particular entails the capacity for self-regulation, and thus the ability to discriminate between thoughts and feelings, as well as the capacity “to achieve a solid sense of self and identity” (Skowron & Schmitt, 2003, pp. 209-210). Kim-Appel, Appel, Newman and Parr (2007) describe self-differentiation as “a healthy emotional detachment or the ability to maintain objectivity by separating affect from cognition” (Kim-Appel et al., 2007, p. 224). Skowron and Dendy (2004) also discuss the nature of self-differentiation and define it as the ability of the self “to engage in thoughtful examination of situations, to maintain full awareness of one’s emotions, and to experience strong affect or shift to calm, logical reasoning when circumstances dictate” (Skowron & Dendy, 2004, p. 339). Skowron and Dendy (2004, p. 351) concluded that greater self-differentiation indicates the ability to engage in conscious effortful controlled behaviour in terms of the capacity to distinguish between thinking and feeling systems. In sum, greater self-differentiation implies a process wherein the self exerts the ability to achieve and maintain an autonomous sense of self (identity), keeping feelings of anxiety under effortful and intellectual control, while sustaining and upholding emotionally connected relationships across a wide range of personal and interpersonal situations (Skowron & Dendy, 2004, p. 351).

2.3.2 THE ROLE OF SELF-REGULATION AND INTERDEPENDENT RELATING

Skowron, Holmes and Sabatelli (2003, p. 124) identified two distinct dimensions of self-differentiation, namely 1) self-regulation and 2) interdependent relating. *Self-regulation* entails the ability to maintain a strong I-position (a solid sense of self) and the ability to modulate emotional reactivity (Skowron et al., 2003, p. 124). Self-regulation is also a distinctive personality trait (Baumeister, Gailliot, DeWall & Oaten, 2006, p. 1773), actively involved in the initiation and alteration of thoughts, emotions and behaviour with the view to guide behaviour in accordance with future-determined long-term goals that are in alignment with the ideal self (Baumeister & Vohs, 2003, pp. 199-200). Baumeister et al. (2006, p. 1796) regard self-regulation as, in all probability, the most important element of the self because it provides the strength for building a powerful self-esteem to overcome weaknesses and obstacles in everyday life situations.

Interdependent relating embodies the ability to freely relate to others such as parents and peers, and to be comfortable with one's feelings of independence and togetherness in close relationships (Skowron et al., 2003, p. 124). Interdependence requires a strong, stable and well-differentiated I-position. Thus, self-regulation resembles the intrapsychic component of differentiation, involving the thinking and feeling processes, whereas the interpersonal relating dimension refers to the ability to balance the forces of togetherness and autonomy in relationships (Skowron et al., 2003, p. 124).

2.3.3 INTERDEPENDENCE: THE I-POSITION

Self-differentiation represents an important self-regulatory function of the self in terms of enabling the individual to take an I-position in relation to the self, others and the external world (Heine et al., 2006, p. 90; Skowron & Friedlander, 1998, p. 235). The individual's I-position or "I-self" (Tracy & Robins, 2007f, p. 5) refers to a solid sense of self or identity (Skowron & Schmitt, 2003, pp. 209-210) and to an "ongoing sense of self-awareness" (William James, 1890, as cited in Tracy & Robins, 2007f, p. 5). A solid sense of self can be contrasted with a pseudo self, that lacks authenticity. Taking an I-position reflects the ability to be flexible and adaptable in managing everyday life and stress situations (Skowron & Friedlander, 1998, p. 235). A strong I-position that is characterised by a coherent sense of self also exerts a positive influence on interpersonal relationships through the fostering of intimacy, harmony and trust in relationships and ensuring the predictability of behaviour in social interactions (North & Swann, 2009, p. 142). The

centrality of the I-position in relationships represents the capacity to maintain a clear and coherent sense of self and to uphold one's sense of autonomy by staying with one's personal convictions and beliefs in a thoughtful way despite undue pressure from others to do otherwise (Skowron & Friedlander, 1998, p. 235).

Another aspect of the self is described as the objective, "me-self" (Tracy & Robins, 2007f, p. 5) in terms of the occurrence of mental representations. The "me-self" in relation to the "I-self", plays an active role in the constitution of identity on an interpersonal level (Tracy & Robins, 2007f, pp. 5-6). The development of a "deep-rooted sense of self-esteem" (Tracy & Robins, 2007b, p. 264) is closely related to the quality of the I-position and as such exercises a considerable influence on several intrapsychic and interpersonal processes (Tracy & Robins, 2007b, p. 264). For example, the self-verification process in terms of self-views provides a powerful sense of psychological coherence, and seems important for building self-esteem (self- and social acceptance), evoking feelings of well-being (less anxiety) and psychological health (North & Swann, 2009, pp. 131, 136).

2.3.4 INTERDEPENDENCE: FUSION WITH OTHERS

Fusion with others is described in the literature as an emotional dysfunctional state associated with people who stay emotionally dependent on and occupied with their families of origin, and who do not develop to full maturation (Skowron & Friedlander, 1998, p. 235). When someone is highly fused with others they tend to lack strong personal convictions and beliefs, as well as the ability to express personal opinions on events. Thus, they rely heavily on the acceptance and approval of others (Skowron & Friedlander, 1998, p. 235). According to Bowen's theory (1978, as cited in Skowron and Friedlander, 1998, p. 235), fusion with others is defined as the "blurring of boundaries" (Skowron & Schmitt, 2003, p. 210) between individuals or family members, or "the borrowing or trading of self" (Skowron & Schmitt, 2003, p. 210) in relationships. In addition, the tendency to fuse with others can be explained in terms of greater role constraints, low tolerance for differences of opinion and difficulty in making one's own decisions (Skowron & Schmitt, 2003, p. 210). Highly fused individuals are caught up in an overinvolvement with significant others where it comes to independent decision-making and the formulation of their own views, without weighing adopted beliefs and values against their personal life principles (Skowron & Schmitt, 2003, p. 210).

2.3.5 SELF-REGULATION: EMOTIONAL REACTIVITY

Emotional reactivity is characterised by a tendency to react impulsively to immediate responses from others on an affective level, and is associated with deep emotional distress and psychological dysfunctional behaviour (Skowron & Friedlander, 1998, p. 236). Less differentiated people are prone to emotionally reactive behaviours, and as a result, they experience greater chronic anxiety because they respond impulsively to the emotionality of others (Skowron & Friedlander, 1998, pp. 235-236). Intellectual reasoning becomes entangled with feelings of uncertainty and impulsiveness, with the result that decisions are made on basis of what “feels right” (Skowron & Friedlander, 1998, p. 235) as opposed to what seems to be logic and sensible (Skowron & Friedlander, 1998, p. 235). Emotional reactivity is believed to operate as a mediator in the relationship between attachment anxiety, negative mood and interpersonal problems (Wei, Vogel, Ku & Zakalik, 2005, p. 14).

2.3.6 SELF-REGULATION: EMOTIONAL CUTOFF

Emotional cutoff refers to emotional isolation from others, and a tendency to become uninvolved in interpersonal relations. Emotional cutoff negates the role of significant others (Skowron & Friedlander, 1998, p. 236). Interpersonal isolation manifests itself in “attachment avoidance” (Wei et al., 2005, p. 21) which is aimed at avoiding potential conflicts, rejections and disappointments (Wei et al., 2005, p. 21). People who distance themselves from others often exaggerate their independence from others and often boast their emancipation from parents (Skowron & Friedlander, 1998, p. 236). The emotionally cutoff person experiences intimacy strongly (Skowron & Friedlander, 1998, p. 236) and it seems that the attachment avoidance strategy is as a result initially used as a protective mechanism to deal with other people’s unavailability or unresponsiveness (Wei et al., 2005, p. 21). According to Wei et al. (2005, p. 21) the negative effects of attachment avoidance are fully mediated through emotional cutoff, whereas attachment anxiety is mediated through emotional reactivity. Emotionally reactive and emotionally cutoff individuals are poorly differentiated and display a self-esteem that is largely dependent on the approval of others, while conforming to the views and ways of others (Skowron & Friedlander, 1998, p. 236).

2.3.7 EMPIRICAL RESEARCH ON SELF-DIFFERENTIATION

Research findings of Skowron and Friedlander (1998) lend support for the notion that differentiation of self contributes significantly to psychological health and well-being (Bowen, 1976, 1978, as cited in Skowron & Friedlander, 1998). Emotional reactivity and emotional cutoff are seemingly unique predictors of global maladjustment and difficulties in handling affect in general and trait anxiety in particular (Skowron & Friedlander, 1998, pp. 235, 240-242). In terms of gender differences, higher levels of differentiation are significantly associated with greater emotional health and general psychological well-being in both men and women (Skowron et al., 2003, p. 124). The findings of Skowron et al. (2003, p.124) revealed that interdependent relatedness and self-management skills accounted for well-being in women, while men reported adjustment problems associated with lower levels of differentiation.

In terms of marital relationships, self-differentiation, particularly in respect of emotional reactivity and cutoff, is strongly related to satisfaction. Patrick, Sells, Giordano and Tollerud (2007) also demonstrated that differentiation is highly related to personality variables, particularly with respect to the ability to separate thoughts from feelings (Bowen, 1978, as cited in Skowron & Friedlander, 1998, p. 235). Well differentiated individuals reveal the capacity to maintain a sense of self in relationships and autonomy in their involvement with others (Patrick et al., 2007, pp. 360, 365). Well-differentiated people are less reactive to stressful situations (Patrick et al., 2007, p. 365) and generally very capable of effortful control in terms of displaying behaviours that are given thoughtful attention to (Skowron & Dendy, 2004, p.350). Low levels of emotional reactivity and emotional cutoff generally allow people to control anxiety without becoming disengaged (Skowron & Dendy, 2004).

Skowron, Wester and Azen (2004) explored the relationship between self-differentiation, student stress and psychological adjustment, and found that self-differentiation mediates psychological symptoms and exogenous stress in males and females. The study found that academic stress can be partially explained by students' capacity to uphold a firm I-position in important relationships, to regulate and control emotionally reactive responses and to stay socially connected with significant others. Murdock and Gore (2004) also examined the relationship between self-differentiation and stress, coping problems and dysfunction in a sample of university students. Findings show that self-differentiation is a significant predictor of perceived stress and psychological distress. Their study also

indicated that students who use reactive and suppressive coping styles display poor psychological functioning (Murdock & Gore, 2004, p. 331). Furthermore, greater differentiation of self was found to be positively associated with reflective coping, whereas reactive and suppressive coping strategies were related to lower levels of differentiation (Murdock & Gore, 2004, p. 331). In sum, well-differentiated students experience fewer psychological symptoms (Murdock & Gore, 2004, p. 331).

It is also important to consider cultural variations in self-differentiation. Gushue and Constantine (2003) addressed cultural processes in self-differentiation by considering the role of individualism and collectivism. Their findings indicate that more differentiated students tend to value “individual uniqueness” (Gushue & Constantine, 2003, p. 9) highly and evaluate themselves as equal to others, expressing the ability to stand by their beliefs without cutting off contact with important or significant others (Gushue & Constantine, 2003, p. 9). Vertical individualism was negatively related to emotional reactivity and emotional cutoff. In terms of horizontal collectivism, students who perceive themselves as belonging to their specific cultural group and who express the willingness to put the goals of the group first, seem less inclined to revert to emotionally reactive and avoidance behaviours (Gushue & Constantine, 2003, p. 11). In sum, Gushue and Constantine (2003) concluded that more differentiated African American students strive for harmony and emotional intimacy in their relations with others on both personal and group levels without losing their sense of self or identity.

Eaton and Louw (2000, p. 210) conducted a cross-cultural study on the abstract-concrete and independent-interdependent dimensions of self-construal among students in the South Africa. Since home language is regarded as a rough indicator of cultural identity, they used the content of protocols from a sample of African-language speakers and compared it with the protocol content from a sample of English speaking participants. Their findings are in accordance with individualism-collectivism theory, indicating that the self-descriptions of African-language speakers are more interdependent and concrete than their English speaking counterparts. The implication is thus that connectedness or autonomy in collectivist cultures directly encourages the development of a predominantly interdependent self as opposed to the development of a highly independent self (Singelis & Brown, 1995, as cited in Eaton & Louw, 2000, p. 211) in modern Western countries. It further follows that African students’ descriptions of themselves are very specific and contextualised, and that they experience their relatedness to others as fundamentally part of their identities (Eaton & Louw, 2000, pp. 211, 215-216). Findings indicate that women’s

self-descriptions seem to be more relational-orientated than those of men, with a tendency to incorporate interpersonal social relationships into their self-concepts rather than group relationships (Eaton & Louw, 2000, p. 216). However, Eaton and Louw (2000, p. 215) argue that the results of their study must be treated with caution, because university students in South African context typically are more exposed to individualism than the general population. An individualistic approach to academic achievement demands emphasises individual striving, competition and the development of individual potential (Oyserman, 1993, as cited in Eaton & Louw, 2000, p. 215).

Heuchert, Parker, Stumph and Myburgh (2000) investigated the structure of personality in terms of the Five-Factor Model of personality in students of a particular college in South Africa. Their findings revealed that the structure of personality is highly similar between the racial groups in this specific higher education institution. However, they found some principle differences: Blacks scored lower in Openness to Experience than did Whites or Indians, whereas Whites scored higher in Extraversion than did Blacks or Indians, and significantly higher in Agreeableness than did Blacks (Heuchert et al., 2000, p. 122).

Van Dyk and De Kock (2004) explored the relevance of individualism and collectivism among a group of undergraduate officer students at the South African Military Academy. No differences were found between the different cultural groups with regard to the levels of individualism-collectivism (Van Dyk & De Kock, 2004, p. 93). The results probably represented a shift from a collectivistic to a more individualistic form of self-construal and that students tend to adopt a moderation that no longer strictly adheres to traditional stereotypical orientations (Van Dyk & De Kock, 2004, p. 94).

2.4 PRIDE

2.4.1 TYPES OF PRIDE

Lewis (2004, p. 635) distinguishes two dimensions of pride: *pride in accomplishment* and pride that indicates *a negative emotional state*. Pride in accomplishment refers to the feelings experienced when a particular goal or activity has been successfully achieved, whereas a negative emotional state is indicated when pride is associated with feelings of arrogance and haughtiness (Lewis, 2004, p. 635). Lewis (2004, p. 635) accommodates these two types of pride within two distinct dimensions: *specific pride* and *global pride*. To this effect Lewis (2004, p. 635) uses the term *specific pride* to describe specific achievement and *hubris* to describe global pride. Global pride represents “false pride”

(Lewis, 2004, p. 635) that seems to be associated with a pseudo, poorly differentiated self. The inclination of the self to focus on itself both as subject and object is related to a maladaptive involvement in the self and particular self-views that give rise to hubris or pridefulness (Lewis, 2004, pp. 623, 625-626). Other researchers have also contributed to the description of different types of pride. Tangney (2005, p. 395) came forward with the terms *alpha pride* to describe feelings of *pride in self* that are largely maladaptive (a distorted attempt to enhance the self) and *beta pride* that refers to *pride in behaviour*. Tracy and Robins (2004, p. 116) have identified two clusters or facets of pride: *achievement-oriented pride* and *hubristic pride*. The term beta pride was eventually assimilated into a newly created construct namely *authentic pride* which, along with *hubristic pride*, constitutes the two-faceted structure of pride (Tracy & Robins, 2007b, p. 264).

2.4.2 PRIDE AS A MORAL EMOTION

To understand pride's relation to the self or identity also requires a reflection on the moral nature of the self (Tangney et al., 2007b). Haker (2004, pp. 359-360) refers to the self as the *moral self* in terms of an *ethical existence* within particular psychological and social structures. The relationships involved in these structures imply a specific responsibility between the self and others and can be explained as a moral responsibility between the narrative self and the challenges posed by the socially, culturally and historically shaped world (Haker, 2004, p. 360). Self-relevant emotions are labelled by Haidt (2003, p. 853) as *moral emotions* and are specifically related to the interests of society or persons other than the self as the active agent. Pride's moral capacity displays the potential to influence people's moral choices and behaviours, and in this capacity provides the motivation or the energy to adhere to moral standards (Tangney, 2005, pp. 385-386; Tangney et al., 2007b, p. 347). It is believed that pride may exert a moderate influence on the interaction between moral standards and moral decisions and as such eventually determine moral behaviours (Tangney et al., 2007b, p. 346). When one behaves in accordance with morally and socially accepted standards, feelings of pride and self-approval are evoked as a result of the critical feedback that is given to the self by those feelings in terms of one's feelings of self-worth and social acceptance (Tangney, 2005, pp. 384, 386). In this regard, the moral importance of pride is embodied in its function as a self-regulatory mechanism (Tangney, 2005, p. 384).

Furthermore, individual differences in moral reasoning and moral emotion in terms of a particular proneness to pride seem to considerably influence the determination of moral choices and moral behaviour in real-life situations (Tangney, 2005, p. 385). When moral standards are met or exceeded, pride feelings are experienced, providing the motivation to reward and reinforce one's commitment to morally, autonomous decision-making and responsible behaviour based on certain ethical and spiritual principles (Tangney et al., 2007b, p. 360). Pride (as with other self-relevant emotions) provides the "motivational force" or the "power and energy" (Tangney, 2005, p. 386), capable of influencing the courses of action that people intend and choose to follow, and as such plays an important role in guiding behaviour and motivating people to respond and adhere to morally appropriate and socially acceptable standards (Tangney, 2005, p. 385).

Pride, along with shame, guilt and embarrassment, belongs to a family of emotions that are described in the literature as a special class of emotions that can motivate and regulate people's thoughts, feelings and behaviours (Tangney, 2005, p. 384; Tracy & Robins, 2007e, p. 190). Pride is closely associated with the development of self-esteem. It helps people to maintain a positive self-concept and to acquire the respect of others. Pride is "critically involved in the self" (Tracy & Robins, 2007e, p. 190) and is dependent on cognitive processes.

Self-awareness and self-representations are preconditions for people to experience pride (Tracy & Robins, 2007f, p. 5). When self-awareness and self-representations are activated, the process of self-evaluation is set into motion, enabling the occurrence of pride as a self-relevant emotion (Tracy & Robins, 2007f, p. 6). Thus, the experience of pride requires the ability to form stable self-representations and to consciously self-reflect on them (Tracy & Robins, 2007f, p. 7).

2.4.3 TWO FACETS OF PRIDE: AUTHENTIC AND HUBRISTIC PRIDE

Although pride is considered an autonomous construct, evidence indicates that it probably consists of two or even more distinct emotions or dimensions (Tracy & Robins, 2007d, p. 506). The process model developed by Tracy and Robins (2004a; 2007d) emphasises the differences between authentic pride as the prosocial and achievement-oriented dimension of pride, and the hubristic form of pride associated with the negative narcissistic, self-aggrandising dimensions of pride (Tracy & Robins, 2007d, p. 507). Therefore, authentic pride results from successes in the achievement domain and can

lead to positive behaviours that contribute to the development and sustainment of self-esteem. In contrast, hubristic pride is associated with narcissism and tends to provoke antisocial and maladaptive behaviours such as aggression, hostility and conflict within interpersonal relationships (Tracy & Robins, 2007d, p. 507).

Both authentic and hubristic pride seem to be associated with concepts such as self-esteem and narcissism respectively, whereas the two facets also show a relatedness to shame-proneness and the Big Five personality dimensions (Tracy & Robins, 2007d, p. 520). The two facets significantly differ from each other with respect to their personality profiles (Tracy & Robins, 2007d, p. 521). Authentic pride, “a prosocial, achievement-motivated emotion”, (Tracy & Robins, 2007d, p. 508), seems to be strongly related to a genuine high self-esteem and personality traits such as extraversion, agreeableness, openness and conscientiousness, while hubris tends to be displayed in terms of a self-aggrandising self-esteem associated with disagreeableness and non-conscientiousness (Tracy & Robins, 2007d, pp. 508, 521). Authentic and hubristic pride display very similar trends in comparison with guilt and shame respectively: the conceptualisation of the relationship between authentic pride and guilt are characterised by a focus on the negative or antisocial behaviours of the individual, whereas hubristic pride and shame are conceptualised in terms of a focus on the negative aspects of the self (Tracy & Robins, 2007d, p. 507). Seemingly, it is this basic difference that may be responsible for the wide range of contrasting manifestations that are associated with authentic pride and guilt on the one hand, and hubristic pride and shame on the other (Tracy & Robins, 2007d, p. 507). Tracy and Robins (2007b, p. 268) argue that there are reliable and measureable individual differences involved in the proneness to experience pride in both authentic and hubristic pride.

The two-faceted structure of pride can also be distinguished by clear, attributive styles in terms of ascribing success and failure to effort and ability (Tracy & Robins, 2007d, p. 521). For example, the authentic pride facet seems to be positively correlated with effort that results in success, while the hubristic facet is positively correlated with ability as the cause for success (Tracy & Robins, 2007d, p. 521). Furthermore, the two facets seem to display divergent correlates: authentic pride is related to adaptive correlates such as genuine self-esteem (Tracy et al., 2009, p. 196), agreeableness and conscientiousness, and social status in terms of prestige (Cheng, Tracy & Henrich, 2010). In contrast, hubristic pride as the more antisocial facet is associated with maladaptive correlates such as narcissistic self-aggrandisement and dominance that appear to be positively related to

aggression, neuroticism, disagreeableness and non-conscientiousness (Cheng et al., 2010; Hart & Matsuba, 2007, pp. 128-129; Tracy & Robins, 2007d, pp. 508, 521).

2.4.4 EMPIRICAL RESEARCH ON PRIDE

Tracy and Robins (2007b, p. 266) have demonstrated that the two facets clearly display distinct and highly divergent personality correlates (Tracy & Robins, 2007a, p. 149). Authentic pride is positively related to genuine self-esteem associated with prestige, whereas hubris is positively correlated with a narcissistic self-aggrandising self-esteem associated with dominance in terms of social status (Cheng et al., 2010, p. 2; Tracy & Robins, 2007b, p. 266). Findings also suggest that authentic pride is negatively related to shame-proneness, but positively related to the more socially desirable and adaptive personality traits such as extraversion, agreeableness, conscientiousness, emotional stability and a genuine self-esteem, while hubristic pride seems to be negatively associated with these traits (Hart & Matsuba, 2007, p. 128; Tracy & Robins, 2007a, p. 149; Tracy & Robins, 2007b, p. 267).

Findings from Tracy et al. (2009, p. 209) support a predicted relationship between authentic pride and genuine self-esteem, whereas hubristic pride positively relates to narcissism in a predictive way (Tracy & Robins, 2008, p. 528; Tracy et al., 2009, p. 209). In a different study, Tracy and Robins (2007f, p. 15) report that people who suffer from a low self-esteem tend to react with negative affect when confronted with an ego threat and as a result withdraw from task responsibilities. An act of withdrawal, considered as the outcome of negative emotion, can be associated with feelings of shame and when failure is experienced it may be indicative of “a stable, global shortcoming of the self” (Tracy & Robins, 2007f, p. 15). Individuals with high self-esteem will probably experience guilt rather than shame and anger, and to this effect guilt will function to promote reparative action and increased future efforts towards success (Tracy & Robins, 2007f, p. 15).

Hart and Matsuba (2007, p. 128) found that hubristic pride correlates negatively with personality traits such as generativity, openness to experience, agreeableness and conscientiousness, and correlates positively with neuroticism. Individuals high in hubris seem less interested in socialising and assisting other people in need (Hart & Matsuba, 2007, p. 129). Hubris is associated with emotional instability which is manifested in, among others, aggressive and hostile reactions within interpersonal relationships leading to relationship conflict and self-destructive behaviours (Hart & Matsuba, 2007, p. 129).

Results also indicate that narcissists tend to become highly aggressive and violent when insults and criticism threatens their perception of self (Hart & Matsuba, 2007, p. 129).

In a study with undergraduate students, Cheng et al. (2010) demonstrated that dominance and prestige represent two distinct correlates of social status and are utilised by hubristic- and authentic-oriented individuals as distinct strategies/ways of attaining and maintaining social status. Thus, achievements that are highly rated in social environments are often rewarded with approval, acceptance and social status. Previous research revealed a considerable difference between hubris and authentic pride on the state level (momentary emotional response) and trait level (a chronic and dispositional tendency). Cheng et al. (2010) showed that both state and trait hubristic pride and authentic pride are associated with distinct personality dispositions and are articulated by dominance and prestige respectively. Thus, people who experience a high level of hubris tend to view themselves and are viewed by their peers as dominant, while people who experience authentic pride are viewed by their peers as prestigious (Cheng et al., 2010).

Although pride displays a definite, recognisable nonverbal expression across global cultures, it seems that cultural differences such as situational elicitors, display rules and societal values are attributed to the emotion (Tracy & Robins, 2007b, p. 273). According to Tracy and Robins (2007b, p. 273) the pride emotion is regarded more negatively in collectivistic cultures (where pride is not considered a desirable emotion) as opposed to individualistic-oriented cultures. Tracy and Robins (2007b, p. 273) refer to a number of studies that are consistent with the view that the experience of pride is culturally differentiated. They suggest that the two divergent facets of pride may be in particular responsible for the prevalence of culturally based divergent views on pride (Tracy & Robins, 2007b, p. 273; Tracy, Shariff & Cheng, 2010, p. 165). In collectivistic cultures pride is predominantly conceptualised in terms of hubris, which accounts for the negative view of pride found in some of these cultures (Tracy & Robins, 2007b, p. 273; Tracy et al., 2010, p. 165). However, it is argued that the occurrence of pride in group contexts can be authentic or hubristic pending the precondition that the eliciting of the emotion must be activated by collectivistic-oriented self-representations, rather than by personal self-representations (Tracy & Robins, 2007b, p. 273; Tracy et al., 2010, p. 166). According to Tracy and Robins (2007b, p. 273) it is also believed that even the nonverbal universally recognised pride expression may be influenced by cultural factors, for example, when nonverbal expressions are observed in participants from the same culture higher levels of recognition are recorded. In sum, pride appears to be a universally recognisable emotion

to the extent that it functions as an adaptive emotion utilised to maintain and enhance social status (Tracy & Robins, 2007b, p. 274).

Tracy and Robins (2007e, p. 200) reported that a growing body of research believes that culture exerts a considerable influence on the way the self is construed. With reference to collectivistic versus individualistic cultures, evidence came to the fore that the self is embedded within a broader social context in which the individual is dependent and reliant upon the social group as a whole (Tracy & Robins, 2007e, p. 200). In contrast, individuals from more individualistic oriented cultures tend to construe the self more independently and primarily separate from the social group (Tracy & Robins, 2007e, p. 200). Cultural differences in the way that the individual construes itself, essentially lead to cultural differences in emotion, which will inevitably affect pride as an “ego-focused” (Tracy & Robins, 2007e, p. 200) emotion in individualistic cultures. It thus follows that pride will be more associated with the self as an independent entity in respect of self-enhancement and social status, whereas the “other-focused” (Tracy & Robins, 2007e, p. 200) emotions such as shame are more likely to be experienced in terms of an interdependent perspective of the self in collectivistic-oriented cultures (Tracy & Robins, 2007e, p. 200). According to Tracy and Robins (2007e, p. 200) researchers have reached some consensus that most emotions, including pride, are likely to possess both universal and culture-specific components. Furthermore, there is also agreement on the assumption that although emotion/pride expressions occur across different cultures, there also seem to be remarkable cultural differences in the way in which expressions are regulated through specific display rules (Tracy & Robins, 2007e, p. 200). In conclusion, Tracy and Robins (2007e, p. 201) argue that the self and emotion are interconnected in respect of cultural differences in self-evaluative processes and self-representations that are bound to partly account for cultural differences in the frequency of occurrence and the valence of the emotions (including pride). Appraisals of an event that elicits a particular emotion can also be explained in terms of cultural differences. However, specific cross-cultural similarities in human emotion capacities such as self-reflection, self-representations, evaluation of identity goals, etc. seem to foster a universal capacity to experience pride, along with other self-relevant emotions (Tracy & Robins, 2007e, p. 201).

Suh, Diener, Oishi and Triandis (1998, p. 482) used international data from sixty one nations around the world, including data from African countries such as South Africa, Zimbabwe, Ghana, Nigeria, Tanzania and Egypt. They studied the relative importance of emotions versus normative beliefs for life satisfaction in terms of a comparison between

individualist and collectivist nations. They found that in highly individualistic cultures the goal for the individual is to become independent of others. In these cultures internal attitudes, emotions, beliefs and preferences represent the most diagnostic markers of identity (Suh et al., 1998, p. 483). The internal features of the self are regarded as the primary determinants of behaviour and individuals are expected to think and behave in accordance with their beliefs and feelings (Suh et al., 1998, p. 483). On the other hand, within collectivistic cultures, which represent about two thirds of the world's population, the most important normative task is to maintain harmony with others and to adhere to needs and expectations of that particular culture (Suh et al., 1998, p. 483). The authenticity of the individual's expression of emotions and inner feelings within more collectivistic cultures is construed as a sign of personal immaturity and selfishness. Emotional expressions (such as pride and other self-relevant emotions) are only regarded as meaningful in relation to the feelings and thoughts of other group members and as such crucially important in defining the self (Suh et al., 1998, p. 483). On the contrary, within individualistic cultures a person's inner feelings and expressions of emotions are regarded as a virtue (Suh, 1998, p. 483)

2.5 COMMITMENT

2.5.1 COMMITMENT AND IDENTITY

Commitment has been studied in various contexts, the most notable being interpersonal (romantic contexts) and organisational contexts. As a discussion of commitment in organisational contexts is outside the scope of the present study, I focus my attention on studies of commitment in a non-relational context, particularly on a discussion of Rusbult's Investment Model Scale (1998) of commitment. It implies that commitment, being framed within the Meaning Maintenance Model, is conceptualised in respect of its relatedness to self-differentiation and pride as meaning and identity-related constructs in an academic context.

Foote (1951, as cited in Burke & Reitzes, 1991, p. 239) introduced commitment as a psychological concept to address the question as to how individuals motivate themselves to initiate and sustain their courses of action. His understanding of commitment is based on the underlying principle of identification and to this effect he defines commitment as "commitment to a particular identity or a series of identities" (Foote, 1951, p. 16). With reference to the link between commitment and identity, Foote (1951, pp. 14-16; Burke &

Reitzes, 1991, p. 239) argues that complete commitment to an identity is required for the sustainment of an active self as well as for explaining the persistence in a particular course of action.

In their formulation of commitment Burke and Reitzes (1991, p. 248) follow a different line of argument and propose that a particular type of activity represents an output of the identity process, as opposed to the theory of Becker (1960, 1964, as cited in Burke & Reitzes, 1991, p. 240) and Kanter (1968, 1972, as cited in Burke and Reitzes, 1991, p. 240), who conceptualised commitment in terms of stable lines of action (Burke & Reitzes, 1991, p. 248). Foote (1951, pp. 14-16) argues that role playing which is not embedded in identity, can be regarded as behaviour without motive and incentive and as such without a meaningful purpose. Commitment to an identity promotes the enhancement of the self and at the same time establishes a connection between the self and the social structure (Burke & Reitzes, 1991, p. 239). In other words, commitment can be seen as a way, among others, through which individuals can infuse self-meanings and self-motives in a variety of roles within the social structure (Burke and Reitzes, 1991, p. 248). According to Burke and Reitzes (1991) commitment is better understood in terms of the perspective that commitment essentially entails “a tie to one’s identity in terms of *maintaining particular inputs to the identity process*” (Burke & Reitzes, 1991, p. 248). This implies that the identity process reflects the particular meaning of the self in congruence to the role identity process (Burke & Reitzes, 1991, p. 248). Burke and Reitzes (1991, p. 250) argue that individuals are in control of their own identity processes and will attempt to maintain their identities through commitments. Individuals who are more strongly committed, put in extra effort to maintain their identities and to this effect, commitment measures the degree to which individuals try to secure and uphold their inputs and achievements (Burke & Reitzes, 1991, p. 250). From a sociological point of view, Kanter (1968, 1972, as cited in Burke and Reitzes, 1991, p. 240), defined commitment in terms of the willingness of members to devote their energy and loyalty to their community, and as such commitment can be understood as an “attachment of the self to the requirements of social relations that are seen as self-expressive” (Kanter, 1972, as cited in Burke and Reitzes, 1991, p. 240). Three dimensions of commitment are identified by Kanter (1972, as cited in Burke & Reitzes, 1991, p. 240): 1) *instrumental commitment* that refers to material benefits, 2) *affective commitment* that entails positive feelings aimed at community cohesion and the generation of gratifications that arise from community involvement, and 3) *moral commitment* that involves a set of evaluative orientations intended to equip members with

a sense of self-worth and self-esteem, as well as with pride and confidence in the values and goals of the community.

More recently, Lieberman (1998) has contributed significantly to the literature on commitment by analysing the structure and requirements of commitment from a moral perspective. He differentiates between two distinctive types of commitments namely, “intention-like” and “substantive” commitments (Lieberman, 1998, p. 5). Substantive commitments differ from intention-like (an intention, a determination to achieve something) commitments, desires and policies in the sense that substantive commitments involve the processes of self-understanding and identity constitution (Lieberman, 1998, pp. 5, 68-78, 88-89, 106, 146). Substantive commitment is defined in terms of three features: 1) *the capacity to be revised and reconsidered and stability over time*, 2) *an action-guiding force*, and 3) *its relationship to self-understanding and identity* (Lieberman, 1998, p. 5).

Lieberman’s (1998) perspective on commitment corresponds with the notion that commitment is essentially commitment to identity (Foote, 1951, p. 16). Commitment is viewed by Lieberman (1998) as “a kind of psychological attachment” (Lieberman, 1998, p. 181) in terms of its relatedness to identity-level processes. Human-Vogel (2008) explains the role of commitment in relation to self-regulation and argues that “self-regulation reflects an active and dynamic process of commitment to an identity aimed at maintaining maximum coherence between an individual’s sense of self (their identity) and their behavioural choices” (Human-Vogel, 2008, p. 116). In the process of identity formation or constitution, commitments act as stable points of reference that are utilised by individuals to narrate their identities in terms of developing and expanding a coherent story of their actions and life events with the view to understand who they are (Lieberman, 1998, p. 175). Human-Vogel (2008, p. 121) adds that a strong affective bond with a particular identity will exert a significant impact on the courses of action individuals choose to follow. She concludes that “commitment may very well be the mechanism by which individuals regulate actions and behaviours to increase meaningfulness and hence, to experience positive affect” (Human-Vogel, 2008, p. 121). A coherent narrative of the self that emerges through the construction of commitments can be described as “a unified theory of the self, which makes possible a unified identity” (Lieberman, 1998, p. 180). It can thus be concluded that commitment constitutes identity to the extent that commitment can be viewed as an identity trait that remains stable over time, managed and maintained by the self or identity (Lieberman, 1998, pp. 180-181).

In addition, Lieberman (1998, pp. 1-2) claims that moral realism and moral facts must be taken into account in order to explain commitment in terms of stability, the governance of action, the enhancement of self-understanding and the constitution of identity. Realist evaluative beliefs are required for commitment to be formed (Lieberman, 1998, p. 2). Commitments are established simply because it is believed that they are objectively valuable or worthwhile (Lieberman, 1998, p. 188).

2.5.2 AN INVESTMENT MODEL OF COMMITMENT

The Investment Model Scale of Rusbult et al. (1998) was originally developed to measure and predict commitment in romantic relationships. The investment model scale is based on the Interdependence Theory, which suggests that individuals become increasingly dependent on a particular relationship to the extent that they experience satisfaction in the relationship, but also influenced by the quality of available alternatives (Rusbult et al., 1998, p. 359). Investment size is a third factor which refers to the importance of resources invested in a relationship (Rusbult et al., 1998, p. 359). However, the absence of an identity-related construct in the model is regarded as a significant shortcoming of the model (Human-Vogel, 2013). To bridge this gap meaningfulness was incorporated as a fifth subscale in the new Academic Commitment Scale (ACS) in order to represent the identity aspect of commitment. The objective was to measure students' experiences of meaningful commitments. Meaning/meaningfulness fulfils a core function in identity-level self-regulation (Human-Vogel, 2013, Lord et al., 2011) and according to Demerath (2006) commitment depends on the meaningfulness of an identity. Therefore, since meaning is central to the Meaning Maintenance Model (Heine et al., 2006), the adapted version of the Rusbult et al. (1998) model scale, the Academic Commitment Scale (ACS), is located in the MMM as framework of the present study. In terms of identity-level self-regulation satisfaction will be experienced when the relationship is experienced as meaningful. Alternatively, when the relationship is experienced as meaningless a person may consider a desirable and available alternative. Likewise, the extent to which a relationship is experienced as meaningful may motivate someone to contribute significant resources to the relationship in order to raise the level of meaningfulness of and persistence in the relationship.

Rusbult et al.'s (1998) model of commitment is based on the interdependence theory, with dependence as a central feature of the interdependence structure (commitment level dependent on the levels of satisfaction, quality of alternatives and investment) of the

model in terms of persistence in a particular relationship (Rusbult et al., 1998, pp. 358-359). The specific level of dependence determines the extent to which a particular relationship is needed or required in order to secure desired outcomes (Rusbult et al., 1998, p. 359). The fulfilment of important needs in a relationship (Rusbult & Lange, 1996, as cited in Le & Agnew, 2003, p. 38) is dependent on the degree to which partners rely on one another for pleasing and giving satisfaction (Le & Agnew, 2003, p. 38).

When individuals become involved in a relationship and in the event that dependence increasingly develops on that particular relationship, feelings of commitment emerge (Rusbult et al., 1998, p. 359). Commitment level is defined by Rusbult et al. (1998) as “intent to persist in a relationship” (Rusbult et al., 1998, p. 359) and includes an involvement and a psychological attachment in the relationship that will last over a long period of time (Rusbult et al., 1998, p. 359). Commitment is strengthened by increased dependence on a particular relationship (Rusbult et al., 1998, p. 360). Commitment is regarded as different from dependence in the sense that dependence is the fulfilment of relationship needs such as the desire to persist, i.e., seeking satisfaction, the need to persist in terms of high investments and when there is no choice but to persist as a result of a lack of alternatives (Le & Agnew, 2003, p. 38; Rusbult et al., 1998, p. 360). Commitment, on the contrary, represents the subjective experience of that particular dependence in the relationship (Le & Agnew, 2003, p. 38). According to Rusbult et al. (1998) commitment can be described as “a sense of allegiance that is established with regard to the source of one’s dependence” (Rusbult et al., 1998, p. 360). Le and Agnew (2003) define dependence as “the descriptive, structural state of a relationship” and commitment as “the psychological experience of that state” (Le & Agnew, 2003, p. 38).

Commitment level is thus affected by three different levels of dependence: 1) the degree of satisfaction experienced in the relationship, 2) the availability and possibility of quality of alternatives to the relationship, and 3) the amount and quality of investments made with regard to the relationship (Le & Agnew, 2003, p. 38; Rusbult et al., 1998, p. 358). The three factors or bases of commitment are discussed next.

2.5.2.1 Satisfaction

According to Rusbult et al. (1998, p. 359) people become dependent on a relationship if *satisfaction* is experienced in that particular relationship. Rewards and costs are at stake in a relationship, and determine the gains or losses that are derived from the relationship.

Rewards or costs are compared to personal standards and expectations in terms of their acceptability, and as such constitutes the *comparison level* of commitment (Le & Agnew, 2003, p. 38). According to Rusbult et al. (1998, p. 359) satisfaction level refers to positive affective experiences as opposed to negative experiences, and is influenced by the degree to which important needs in the relationship are fulfilled. Persistence in a relationship depends on whether the outcomes of the relationship are experienced as beneficial and satisfying or not (Le & Agnew, 2003, p. 38). The comparison level and current relationship outcomes are regarded as the function of the satisfaction level: satisfaction is experienced when the outcomes are believed to be better than the standards of the comparison level (Le & Agnew, 2003, p. 38). When outcomes don't meet or exceed the standards of the comparison level dissatisfaction occurs (Le & Agnew, 2003, pp. 38-39). Le and Agnew (2003, p. 39) describe satisfaction as the subjective evaluation of the relative positivity or negativity that is experienced within the particular relationship.

2.5.2.2 Quality of Alternatives

Commitment is also affected by the quality of available and attractive alternative options to the existing relationship (Le & Agnew, 2003, p. 39; Rusbult et al., 1998, p. 359). The quality of alternatives (i.e., the availability and desirability of alternative relationships) indicates a perceived desire to engage in a more attractive relationship. The perception is thus that the alternative will provide more beneficial outcomes, with the expectation that important needs will be met more effectively (Rusbult et al., 1998, p. 359). In this respect the individual may opt to choose for example, a partner who is believed to provide superior outcomes, because the partner is, for example, rich or attractive (Le & Agnew, p. 39). The absence or lack of attractive alternatives may compel the individual to persist within the current relationship, whereas an alternative such as having no relationship, may be viewed as of greater importance than, and preferable to, any other available option (Le & Agnew, 2003, p. 39). In some instances the individual seems to have no other choice but to persist in the current relationship because of extensive investments put into the relationship or the lack of a suitable alternative (Rusbult et al., 1998, p. 359). Another possibility may be involvement in the broader social environment consisting of friends and family members as a desirable and compensatory alternative (Rusbult et al., 1998, p. 359).

2.5.2.3 Investment Size

Some relationships stay intact regardless of the availability of an attractive alternative or even when dissatisfaction is experienced in the existing relationship (Rusbult et al., 1998, p. 359). Thus, a third factor that plays a role in determining the level of dependence must be considered in order to explain the level of commitment (Rusbult et al., 1998, p. 359). Investment size embodies shared, concrete, material possessions invested into the relationship, as well as all the things that are valuable and important to the stability and maintenance of the relationship, including affective and cognitive qualities (Le & Agnew, 2003, p. 39; Rusbult et al., 1998, p. 359). Many resources are mutually built up in order to develop and secure the relationship and several intrinsic resources are invested in terms of time, effort, emotional experiences, shared personal information and personal identity issues, etc. (Le & Agnew, 2003, p. 39; Rusbult et al., 1998, p. 359). The investment of more indirect resources such as sharing children, social networks and social status also contribute to commitment (Le & Agnew, p. 39; Rusbult et al., 1998, p. 359). The termination of the relationship certainly has severe consequences for commitment in view of the fact that investments attached to the partnership would be lost to the detriment of commitment (Le & Agnew, 2003, p. 39). On the other hand, the importance of the invested resources may be weighed against the magnitude of the costs involved in ending the relationship and may persuade partners to persist with the existing relationship, reinforcing commitment (Rusbult et al., 1998, p. 359). In conclusion, according to Le and Agnew (2003, p. 39) the levels of satisfaction, quality of alternatives and investment size are individually and collectively regarded as the antecedents of commitment (Le & Agnew, 2003, p. 39).

2.5.3 THE ROLE OF MEANINGFULNESS IN COMMITMENT

Commitment as commitment to an identity (Foote, 1951) is inevitably linked to the self, since the self is continuously searching for the reason or purpose which underpins the occurrence of certain life experiences (Bering, 2003, p. 101), including commitment. The search for meaning (Frankl, 1965) or the search for a “sense of direction in life” (Frankl, 1965, p. 27) seems to present itself as a significant “motivational force” (Kroll & Egan, 2004, as cited in Tangney et al., 2007b, p. 347) that generates the constitution and development of a unique sense of self or identity. According to Demerath (2006, p. 492) people construct their identities in order to sustain a sense of meaningfulness. Demerath (2006, p. 492) argues that the more meaningfulness an identity provides, the more people

become committed to their identity. Furthermore, when a breakdown in such an identity occurs as a result of cognitive and emotional disruption, it becomes manifested in a loss of security and certainty (Demerath, 2006, p. 492). Demerath (2006, p. 492) also argues that identity maintenance and commitment have a considerable impact on the creation and maintenance of meaningfulness.

2.5.4 EMPIRICAL RESEARCH ON COMMITMENT

2.5.4.1 Commitment in interpersonal context

Rusbult et al. (1998, p. 360) and Le and Agnew (2003, p. 52) have demonstrated that the strength of the Investment Model resides in its ability to predict individuals' commitment to relationships in terms of satisfaction, alternatives and investments that are responsible for the majority of the variance in commitment. According to Rusbult et al. (1998, p. 360) commitment is positively related to satisfaction and investment size, whereas quality of alternatives is negatively related to commitment.

Commitment is a powerful and robust predictor of persistence, regarded by Rusbult et al. (1998, p. 361) as the minimum requirement needed for the sustainability of relationships. Highly committed individuals are more inclined to persist in relationships in comparison with those less committed (Rusbult et al., 1998, p. 360). The three bases of dependence seem to play a significant role in predicting relationship breakup, and in this regard commitment appears to mediate the effects of satisfaction, quality of alternatives and investment (Le & Agnew, 2003, p. 37; Rusbult et al., 1998, p. 383).

With reference to other studies Le and Agnew (2003, p. 52) pointed out that commitment is not only important for predicting relationship persistence, but it is also associated with several other relationship issues such as the ability to be accommodating, the ability to take perspective on the relationship, the ability to repel tempting alternatives and the ability to avoid infidelity. Rusbult et al. (1998, p. 382) found that commitment is strengthened to the degree that an individual becomes dependent on the relationship and to the degree that the individual desires to persist in a relationship that is highly satisfactory. Other factors that contribute to the strength of commitment in a relationship are determined by the extent to which the individual feels compelled to persist as a result of extensive investments made (Rusbult et al., 1998, p. 382). In addition, commitment in a relationship is also strengthened in the event that the individual has no choice but to persist in the absence of suitable alternatives (Rusbult et al., 1998, p. 382).

In respect of demographic differences, Le and Agnew (2003, p. 51) found no significant differences with regard to race or gender, but slight and relatively small, yet significant differences were detected between men and women. Men are more inclined to opt for alternatives, whereas women tend to be more satisfied, invested and committed to their relationships (Le & Agnew, 2003, p. 51). Le and Agnew (2003, p. 54) further found that the investment model can be successfully extended to non-interpersonal domains such as commitment to jobs, hobbies, institutions, decision-making and corporate institutions.

2.5.4.2 Commitment in academic context

Several studies have shown that identity commitment can be successfully utilised as a point of departure in the study of commitment in academic contexts. Seaton and Beaumont (2008, pp. 249-250) examined the role of individual differences in identity styles and their findings suggest that factors such as a curiosity/exploration approach, proactive coping and emotional intelligence are positively associated with identity commitment. They describe individual differences in terms of three different identity styles, namely, 1) an *informational identity style* as an active, exploratory approach, 2) a *normative identity style* as conformity to socially prescribed norms and beliefs, and 3) a *diffuse-avoidant style* as being associated with a delay in constructing an identity.

Identity styles in particular give an indication of the strength of one's commitment to an identity (Burke & Reitzes, 1991, p. 250; Pulkkinen & Kokko, 2000, p. 463; Seaton & Beaumont, 2008, p. 250). The diffuse-avoidant style is associated with low identity commitment, whereas high identity commitment is associated with the informational and normative identity styles. Seaton and Beaumont (2008, p. 250) have pointed out that research in the past had consistently shown that differences in identity style applications are associated with well-being and positive adjustment to life changes. It refers in particular to the processes and outcomes associated with positive or healthy adjustment (Seaton & Beaumont, 2008, p. 250). The findings of Seaton and Beaumont (2008, pp. 251-252) confirm the thesis that both the informational and normative identity styles positively correlate with commitment to an identity, whereas the diffuse-avoidant style correlates negatively with identity commitment.

Berzonsky and Kuk (2005, p. 242) found a link between commitment and the style of identity that students possess when they enter the university environment. According to their findings students displaying an informational identity style are sufficiently prepared to

deal with personal, social and academic challenges (Berzonsky & Kuk, 2005, p. 242). These students apparently have a clear sense of direction and educational purpose which becomes visible in their academic autonomy, as reflected in responsible and effective management of their resources, problem-focused approach and high levels of academic achievement (Berzonsky & Kuk, 2005, p. 242). Information-oriented students display the ability to operate independently without the need to rely on others for approval and reassurance, while they also tend to be tolerant, open to the opinions and views of others and able to relate to individuals from different cultural backgrounds (Berzonsky & Kuk, 2005, p. 242). Normative-oriented students have stable commitments and their academic careers are well-planned in terms of goal setting, but they seem to lack in academic autonomy, which makes it difficult for them to manage their time and regulate their behaviour in an independent way (Berzonsky & Kuk, 2005, p. 243). In comparison to students with an informational identity approach, normative-oriented students are less efficient in establishing lasting interpersonal relationships (Berzonsky & Kuk, 2005, p. 243). The findings of Berzonsky and Kuk (2005, p. 243) show that students who are using a diffuse-avoidant approach are inadequately equipped to deal with academic challenges, particularly because they lack personal and academic autonomy and purpose, as well as management and social skills. These students seemingly operate on a low level of commitment that leads to insufficient academic involvement (Berzonsky & Kuk, 2005, p. 243). They tend to struggle when it comes to time-management, the establishment of friendships and the maintenance of a social support network. Diffuse-avoiders are clearly at risk as a result of adjustment problems in their academic setting (Berzonsky & Kuk, 2005, p. 243).

The findings of a study conducted by Human-Vogel (2008, p. 120) indicate that highly committed postgraduate students' goals generally emerge from a process of self-development and self-growth. Their decisions and courses of action are consistent with how they experience their identity. The goals that they had set for themselves seemed to be meaningful only when those goals allow them to express themselves in terms of their sense of self or identity that shows consistency with an academic environment. Thus, when students perceive, interpret and categorise their social and cultural experiences as meaningful in terms of their identity and self-knowledge, *positive affect* is promoted and commitment to a particular description of their selves is, as a result, intensified (Human-Vogel, 2008, p. 121). A strong affective bond with a particular identity therefore seems to have a significant impact on the courses of action individuals tend to choose (Human-

Vogel, 2008, p. 121). Human-Vogel and Mahlangu (2009) also studied commitment in respect of first-year students' beliefs about aspects of the self (identity) within their academic situation. Findings provide confirmation for Lieberman's (1998) theoretical stance, that evaluative beliefs as the cognitive component of commitment are essentially required for the constitution of commitments and not merely dependent on positive affective states alone (Human-Vogel & Mahlangu, 2009, pp. 91, 107).

Maddi (2006, as cited in Sheard, 2009, p. 191) found that students who are high in hardiness attitudes (commitment, control, challenge) display the ability to use stress to their advantage in the form of creativity, wisdom and fulfilment that are conducive to the maintenance and enhancement of physical and mental health. These students show a capacity to cope with stressful situations such as examinations, meeting course work deadlines and completing research projects. They display the ability to face challenges positively and also succeeded in turning potential disasters into opportunities to the benefit of the self (Khoshaba & Maddi, as cited in Sheard, 2009, p. 191). In this regard, hardiness presents itself as a reliable predictor of university retention (Lifton, Seay & Bushke, 2000, as cited in Sheard, 2009, p. 191). A study was performed by Sheard (2009) with the view to investigate the differential influence of hardiness with regard to age and gender, and findings suggest, among others, that mature-aged students, in comparison with younger undergraduate students, achieve greater academic success. However, no significant difference in chronological age in respect of the three hardiness attitudes was reported (Sheard, 2009, p. 199). Female students were found to perform better than the male participants (Sheard, 2009, pp. 198-199). These results correspond with the findings of Maddi and Khoshaba (2005, as cited in Sheard, 2009, p. 199), suggesting that female students have higher levels of commitment as they regard academic work as important and worthwhile enough to the extent that they are willing to dedicate their full attention, imagination and effort to their academic work. Sheard (2009, p. 198) also concludes that the commitment hardiness attitude represents the most significant positive correlate of academic achievement, and commitment thus can be regarded as predictive of academic achievement as reflected by persisting behaviour in relationships despite stressful situations (Maddi & Khoshaba, 2005, as cited in Sheard, 2009, p. 199). According to Sheard (2009, p. 199) students high in commitment tend to avoid unproductive behaviours with the result that they benefit academically.

Human-Vogel and Dippenaar (2012) adapted the Rusbult et al.'s (1998) Investment Model, using the adapted scale to study pre-service student-teachers' commitment to

community engagement in a service-learning module. The study provides promising results, indicating that the investment model of Rusbult et al. (1998) can be adapted successfully to address commitment in non-interpersonal contexts. Human-Vogel and Dippenaar's (2012) results indicated that the adapted model, the Community Engagement Commitment Scale, proved to be a reliable instrument for the assessment of community engagement. They also found that the additional Meaningfulness subscale contribute to predicting significant variance in commitment level (Human-Vogel & Dippenaar, 2012). Human-Vogel and Dippenaar (2012) argue that meaningfulness, being central to the identity process, may be less influenced by situational changes than satisfaction and therefore more suitable to explain the stability in commitment levels, and may therefore sustain commitment in the absence of satisfaction (Human-Vogel & Dippenaar, 2012).

Dass-Brailsford (2005) studied academic achievement among a sample of black youth in South Africa in terms of resilience, a characteristic which is expected to play an important role in academic commitment. Findings of their study indicate that black students, who achieved academic success in South Africa, revealed a strong sense of initiative and motivation (Dass-Brailsford, 2005, p. 574). These students were goal-oriented and possessed a definite understanding of the self as having the capacity of agency (Dass-Brailsford, 2005, p. 588). Furthermore, the support of families, role models, schools and communities played an important role in their achievements (Dass-Brailsford, 2005, p. 588).

2.6 SELF-DIFFERENTIATION, PRIDE AND COMMITMENT

In the preceding discussion, I argued that self-differentiation, pride and commitment as identity-related constructs inherently possess a self-regulatory function, conducive to the development and sustainment of identity (Human-Vogel, 2013; Skowron & Friedlander, 1998; Williams & DeSteno, 2008). I argued that substantive (or mature) commitment is fundamentally related to identity (Burke & Reitzes, 1991; Demerath, 2006; Foote, 1951; Human-Vogel, 2008; Lieberman, 1998). Self-differentiation is a central function of identity and reflects the capacity to balance the interaction between emotional and intellectual experiences, as well as to develop and maintain a sense of autonomy in intimate and social relationships (Skowron & Friedlander, 1998). Self-differentiation should therefore contribute to the stability in commitment and enable the individual to persist in staying committed (Lieberman, 1998; Skowron & Friedlander, 1998).

The regulation of autonomic behaviours is a core function of self-differentiation (Skowron & Friedlander, 1998). According to Wong (2000, p. 315), independent and autonomic behaviour is initiated and regulated by choices in respect of personal needs, interests, goals and well-being. Autonomy is positively related to academic experience and achievement and as such has a positive impact on academic commitment (Wong, 2000, pp. 323-324). Commitment and self-differentiation seem to converge with regard to building and enhancing self-understanding and self-esteem. To this effect, the I-self operates from a strong I-position (Skowron & Schmitt, 2003) and in association with commitment promotes the enhancement of self-understanding and social structuring (Burke & Reitzes, 1991). Commitments also provide the coherency and consistency that are required for maintaining a solid sense of self or identity, acting as stable points around which identities are formed (narrated) and stabilised (Lieberman, 1998).

Pride is a positive emotion fundamentally relevant to the self and functionally involved in self-differentiation processes (Tangney et al., 2007b). The authentic dimension of pride is positively associated with an adequate or greater differentiated identity or genuine self-esteem and as such display the capacity to contribute meaningful to the establishment and enhancement of a positive self-esteem and a solid sense of self (Skowron & Schmitt, 2003; Tracy & Robins, 2007b). Pride is regarded by Tracy and Robins (2007e) as primarily the affective mechanism behind self-regulation and is of great importance to foster positive self-views that provide valuable feedback to the self in order to deal with negative self-views (North & Swann, 2009). Pride can regulate negative emotions and is actively involved in the down-regulation of persistent negative emotions prevailing in the self (Fredrickson, Mancuso, Branigan & Tugade, 2000). Pride can also motivate and regulate social behaviour and as such provides the energy for pursuing several self-motives such as the desire to be accepted and appreciated within important social relationships, as well as to be successful in achievement domains (Tangney, 2005; Tracy & Robins, 2007a, 2007f). Greater differentiation also seems to foster the experience of strong positive pride experiences, whereas pride in turn may contribute to the sustainment of autonomic behaviour in relationships (Skowron & Friedlander, 1998). The hubristic dimension of pride is associated with a self-esteem in terms of self-views that are narcissistic and dominant in nature (Cheng et al., 2010; Tracy et al., 2009). Hubristic pride is therefore seemingly strongly linked to a low or maladaptive differentiation of self as reflected by a pretended or false sense of autonomy and emotional reactivity in personal as well as in social relationships (Skowron & Friedlander, 1998). The poorly differentiated,

hubristic person may at times revert to the dysfunctional emotional cutoff (withdrawal) strategy in order to avoid feelings of shame (Tracy & Robins, 2007f).

According to Tracy and Robins (2007f) pride can motivate and inspire individuals to work hard in achievement and task-oriented domains, a quality that is also associated with high commitment. Authentic pride, as with commitment, can invoke a desire in people to pursue success despite difficult circumstances, which can lead to increased perseverance in achievement and relational domains (Williams & DeSteno, 2008; 2009). The implication thus, is that the function of pride to mediate perseverance can contribute considerably in supporting people to persist with their commitments, increasing the stability required for the sustainment of commitments. The moral nature of the self is also reflected in pride experiences (Tangney et al., 2007b). Pride as a moral emotion can influence moral choices and behaviours (Tangney, 2005) and, whereas moral values are an integral component of commitment (Lieberman, 1998), it stands to reason that pride can contribute to motivate people to choose commitment as a moral course of action. Persistence with commitment may be further strengthened by pride feelings that are evoked when behaviours are in line with morally and socially accepted standards (Tangney, 2005). The critical feedback to the self that results from morally-oriented pride feelings leads to increased feelings of self-worth and social acceptance (Tangney, 2005) in terms of a heightened level of self-differentiation.

2.7 CONCLUSION

A review of the literature has dealt with the issues surrounding the interrelationships between self-differentiation, pride and commitment in their role as identity-level self-regulation constructs. Sufficient evidence has come to the fore to justify the assumption that they are indeed interactively linked in terms of their potential to inform students' academic performance and achievements in terms of authentic commitments. The assumptions presented in this study are based on the notion that commitment is substantiated in terms of commitment to an identity. Self-differentiation, which is regarded as the most critical variable in the development of personality and psychological well-being, may most likely play a determinant role in stabilising students' emotional and intellectual functioning, which is essentially a requirement for commitment (Lieberman, 1998; Skowron & Friedlander, 1998). This ability, along with a sense of autonomy and independence from others, may offer help to students to adapt to university life and to be more efficient in handling academic stress. A differentiated sense of self in respect of a

solid I-position seems to be essential in making responsible choices and forming stable and meaningful interpersonal relationships, and yet still be able to maintain their sense of independence (Skowron & Friedlander, 1998, p, 235). Based on the literature review it can be concluded that stable and substantive commitments (Lieberman, 1998) display the capacity to support students in staying self-disciplined, conscientious and task-oriented. Pride as a principle motivator of behaviour and social perception may also encourage students to acquire skills and demonstrate abilities that will promote their status and attractiveness in academic and social interactions (Williams & DeSteno, 2009). Students obviously have the desire to achieve success, to earn status in their academic and social groups and to feel good about their selves, and in this respect pride can serve well to satisfy these basic needs (Tracy & Robins, 2007a). The research questions and hypotheses with regard to the existence of a positive interrelationship between self-differentiation, pride and commitment were tested among a sample of undergraduate university students. A pilot study was conducted in respect of the development of the new Academic Commitment Scale (ACS) and the results are presented in Chapter 3.

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SCALE DEVELOPMENT AND PILOT STUDY RESULTS

3.1 INTRODUCTION

The ontological and paradigmatic perspective of the present study is based on the assumption that the self is a basic human entity that can be defined, operationalised, observed, measured, explained and predicted (Creswell, 2008, p. 55). As discussed in Chapter 1, Section 1.9.2, a non-experimental, cross-sectional correlational survey design was chosen as the quantitative methodological framework that formed the basis for the collection and analysis of quantifiable data (Creswell, 2008, p. 60; Mertens, 2010a, p. 162; Mertens, 2010d, p. 177; Punch, 2009b, pp. 219, 222-223). The data collection process was executed by conducting a correlational survey, using a questionnaire consisting of three instruments namely, the Differentiation of Self Inventory-Revised (DSI-R) (Skowron & Schmitt, 2003), the Authentic and Hubristic Pride 7-Item Scales (AHP) (Robins, Nofhle & Tracy, 2007, p. 461; Tracy & Robins, 2007d) and the Academic Commitment Scale (ACS) adapted from the Investment Model Scale (Rusbult et al., 1998). The overarching aim of the present study was to determine whether self-differentiation and pride could be theoretically associated with academic commitment. The methodological programme of the present study comprised of two phases namely, the pilot study and the main study phase which are discussed in Chapter 3 and Chapter 4 respectively (see Chapter 1, Section 1.9.3). The development of the new Academic Commitment Scale (ACS) in terms of scale adaptation, data collection and reliability analysis is discussed in the next section. The reliability and item analyses of the Differentiation of Self Inventory (DSI-R) and the Authentic and Hubristic Pride Scales (AHP) are also addressed in this chapter.

3.2 SCALE ADAPTATION

3.2.1 AIM OF SCALE ADAPTATION

Aspects such as estimating the correct measurement model, testing for measurement equivalence and providing for robust estimates of internal consistency reliability, were important considerations when planning for developing and validating the ACS (Sass & Schmitt, 2011, pp. 300-302). Reliability and validity are critical requirements for the

development of a useful instrument that will enable future research to be conducted in a responsible manner. Adhering to these requirements will enable researchers to replicate the findings of the present study in future studies (Cabrera-Nguyen, 2010, p. 99) in different academic settings. According to Burton and Mazerolle (2011, p. 28) reliability analysis entails measuring or testing consistency and repeatability of a particular instrument. The steps, processes and model considerations that were followed in developing the ACS are discussed next.

3.2.2 SCALE ADAPTATION

As discussed in Chapter 2, Section 2.5.2, the Investment Model of Commitment (Rusbult et al., 1998) measures interpersonal commitment in terms of three bases of dependence, namely, Satisfaction, Quality of Alternatives and Investment Size. The investment model scale's utility for predicting commitment within interpersonal relationships is empirically well-established (Rusbult et al., 1998, p. 384). However, it was found that the model can also be utilised in non-interpersonal contexts such as commitment to jobs, hobbies, decision-making and community engagement, with apparently encouraging results (Human-Vogel & Dippenaar, 2012; Le & Agnew, 2003). The psychometric properties with regard to reliability, internal consistency and validity are favourable aspects of the investment model scale (Cabrera-Nguyen, 2010).

To adapt the Investment Model Scale (Rusbult et al., 1998) the items for the original constructs namely, Commitment Level, Satisfaction, Quality of Alternatives and Investment Size were re-written to reflect academic studies as the object of commitment, rather than interpersonal relationships. Meaningfulness was added as a fifth subscale to assess its utility as an additional predictor of Commitment Level. Meaningfulness was conceptualised as the extent to which students experience their academic environment as meaningful, particularly in terms of 1) how their identities are shaped by their studies, 2) how identity expression can strengthen students' motivation to persist with their academic studies and 3) the extent to which academic studies support students' identity expression.

The first step in adaptation involved the adaptation of the existing items in the Investment Model Scale and assessing its appropriateness in terms of academic commitment as the object of commitment. As advised by Burton and Mazerolle (2011) careful consideration was given to the formulation and wording of the items. As recommended by De Vellis (2012) it was attempted to retain the implicit meaning of words and to preserve the

original sentence construction of the items. Exceptionally lengthy sentences that could lead to a loss of clarity and misinterpretation were avoided as far as reasonably possible (De Vellis, 2012, p. 81). Care was also taken to ensure that the adapted items remain clear, easily understandable and neutral (Burton & Mazerolle, 2011, p.29; De Vellis, 2012; Johanson & Brooks, 2010, p. 394). I retained the sequence of the items as they appear in the original scale (Burton & Mazerolle, 2011, p. 29). As in the original scale, response options required a single response/answer to each sentence along a continuum of possible responses that vary from strongly disagree to strongly agree on a six-point Likert-type scale (De Vellis, 2012). An example of some of the adapted items appears in Table 3.1 below.

Table 3.1: Example items from the original Investment Model (Rusbult et al., 1998) and adapted items from the Academic Commitment Scale (ACS)

Original Commitment Scale (Rusbult et al., 1998)	Adapted Academic Commitment Scale
Commitment Level <i>I feel very attached to our relationship – very strongly linked to my partner.</i>	Commitment Level <i>I feel very involved in my studies – very strongly linked to my studies</i>
Satisfaction <i>I feel satisfied with our relationship.</i>	Satisfaction <i>My studies give me a great deal of satisfaction.</i>
Quality of Alternatives <i>The people other than my partner with whom I might become involved are very appealing.</i>	Quality of Alternatives <i>If I had a choice I would rather do something else than studying (travel, work, socialise).</i>
Investment size <i>I feel very involved in our relationship – like I have put a great deal into it.</i>	Investment size <i>I feel very involved in my studies – like I have put a great deal into it.</i>

Some of the items did not lend themselves to simple changes. For example, the item: *I am committed to maintaining my relationship with my partner*, is not easily adapted to an academic setting as academic studies typically conclude at some point and do not continue indefinitely. The item was eventually adapted to *I am committed to being the best student that I possibly can be*. To anticipate the possibility that some of the adapted items may lose their original meaning, several additional items were also written for each of the ACS subscales (see Table 3.2).

Table 3.2: Additional items for the Academic Commitment Scale (ACS)

ACS
<p>Commitment level</p> <p><i>I am determined to complete my studies successfully.</i></p> <p><i>I will persist with my studies until I complete my degree.</i></p> <p><i>I am not prepared to give up studying.</i></p>
<p>Satisfaction</p> <p><i>I enjoy studying.</i></p> <p><i>I feel content with my studies.</i></p> <p><i>Studying is enjoyable.</i></p>
<p>Quality of Alternatives</p> <p><i>If I had a choice, I would rather do something other than studying.</i></p> <p><i>If I could, I would rather do something other than study.</i></p> <p><i>There are better things in life than studying.</i></p> <p><i>Anything else would be better than having to study.</i></p>
<p>Investment Size</p> <p><i>I spend a lot of time on my studies.</i></p> <p><i>I usually put a lot of effort into my studies.</i></p> <p><i>I do a lot to ensure success in my studies.</i></p>
<p>Meaningfulness</p> <p><i>My studies are very meaningful to me.</i></p> <p><i>Being a student allows me to express myself completely.</i></p> <p><i>My approach to my studies reflects who I am as a person.</i></p> <p><i>My studies contribute to shaping me as a person.</i></p> <p><i>I am the kind of person who thrives on studying.</i></p> <p><i>My studies fulfil me.</i></p> <p><i>Studying is a central aspect of who I am.</i></p> <p><i>Studying lends meaning to my life.</i></p>

The full version of the Academic Commitment Scale (ACS) for the pilot study appears in Annexure B.

3.3 DATA COLLECTION

3.3.1 AIM OF THE PILOT STUDY

The aim of the pilot study was to determine the reliability and internal consistency of the adapted Academic Commitment Scale (ACS), the Differentiation of Self Inventory - Revised (DSI-R) and the Authentic and Hubristic 7-Item Pride Scales (AHP). The pilot study assisted me to assess the items of the adapted scale for clarity and readability (Burton & Mazerolle, 2011, p. 29). The pilot study sample was selected using a one-stage random cluster sampling method (see Chapter 1, Section 1.10.1). Participants provided informed consent according to the ethical clearance requirements of the relevant Ethics Committee. The validity analysis of the adapted ACS was conducted in the main study and the results thereof are presented in Chapter 4.

A sample of 51 students participated in the pilot study, which is well above the minimum of 30 participants recommended for piloting (Johanson & Brooks, 2010, p. 399). Ages of participants ranged from 19 to 36 years ($M = 20.98$; $SD = 3.11$). The sample consisted of four male students (7.8%) and 47 female students (92.2%). Descriptive statistics of the sample are presented in Table 3.3.

Table 3.3: Descriptive statistics of the pilot study sample (N = 51)

	<i>f</i>	%
<i>Gender</i>		
Female	47	92.2
Male	4	7.8
<i>Age in years: N = 51; M = 20.98 years; SD = 3.11 years</i>		
<i>Home Language (N = 50)</i>		
Afrikaans	26	51.0
English	12	23.5
African Languages	11	21.5
Other	1	2.0
Missing values	1	2.0
<i>In which academic year of study are you at present?</i>		
Second year	47	92.2
Third year	4	7.8

	<i>f</i>	<i>%</i>
<i>Do you feel adequately prepared for university studies?</i>		
Yes	42	82.4
No	9	17.6
<i>Do you think you manage your studies effectively?</i>		
Yes	39	76.5
No	12	23.5
<i>Do you set learning goals for yourself?</i>		
Yes	36	70.6
No	15	29.4
<i>Do you feel satisfied with the course you are studying?</i>		
Yes	46	90.2
No	5	9.8
<i>Do you have life-goals that you are working towards?</i>		
Yes	46	90.2
No	5	9.8
<i>Do you have a Facebook/Twitter/social networking account?</i>		
Yes	44	86.3
No	7	13.7
<i>How much time per day (average) do you spend on studying?</i>		
0-60 minutes	15	29.4
60-120 minutes	17	33.3
120 minutes or more	19	37.3
<i>Do you have a part-time job?</i>		
Yes	16	31.4
No	35	68.6
<i>Do you feel supported by your family in your studies?</i>		
Yes	48	94.1
No	3	5.9
<i>Do you live in a residence/commune?</i>		
Yes	25	49.0
No	26	51.0

3.4 RELIABILITY ANALYSES

Cronbach's alpha coefficient was used to assess the reliability of the adapted Academic Commitment Scale (ACS), as well as to assess the reliability of the other two scales namely, the Differentiation of Self Inventory (DSI-R) and Authentic and Hubristic 7-Item Pride Scales (AHP) contained in the combined questionnaire (De Vellis, 2012, p. 108; Sass & Schmitt, 2011, p. 302; Yang & Green, 2011, p. 377). Based on De Vellis' (2012, p. 108) recommendations an alpha coefficient below .60 was regarded as unacceptable, between .70 and .80 as respectable and between .80 and .90 very good. Nunnally (1978, cited in De Vellis, 2012, p. 108) regards .70 as acceptable. The item-analysis for the Academic Commitment Scale appears in Table 3.4 below. Items in italics are those that were removed based on the criterion recommended in the literature and as discussed in Chapter 1.

Table 3.4: Item analysis for the adapted Academic Commitment Scale (ACS) (N = 51; $\alpha = .87$)

Item No	Item Wording	M	SD	Item-Total r
Commitment Level				
CL1	I want to continue with my studies.	5.83	.47	.41
CL2	I am committed to being the best student that I possibly can be.	5.39	.71	.67
CL3	<i>I would not feel very upset if I could not continue with my studies.</i>	5.41	1.22	.26
CL4	<i>It is likely that I will discontinue my studies and pursue something else.</i>	5.28	1.39	.03
CL5	I feel very involved in my studies – very strongly linked to my studies.	5.11	.77	.68
CL6	I want to continue learning even after I have completed my degree.	5.09	1.26	.55
CL7	I believe in life-long learning.	5.52	.84	.39
CL8	I am determined to complete my studies successfully.	5.78	.47	.50
CL9	I will persist with my studies until I complete my degree.	5.74	.54	.39
CL10	I am not prepared to give up studying.	5.78	.42	.50
Satisfaction				
CS1	My studies give me a great deal of satisfaction.	5.13	.81	.70
CS2	I am very happy with my studies.	5.24	.79	.63
CS3	Being able to study is close to ideal.	5.30	.87	.56
CS4	My studies are fulfilling to me.	5.13	.93	.74
CS5	My studies fulfil my needs for intellectual stimulation and intellectual interaction.	5.15	.92	.74
CS6	I enjoy studying.	5.04	1.15	.62
CS7	I feel content with my studies.	5.11	.82	.71
CS8	Studying is enjoyable.	4.85	1.14	.61

Quality of Alternatives				
CA1	If I had a choice, I would rather do something other than study.	2.59	1.61	-.30
CA2	<i>The alternatives to studying are close to ideal (e.g., work, travel, etc.).</i>	3.24	1.72	.11
CA3	<i>If I did not study I would be fine – I would find something more appealing.</i>	2.04	1.26	-.13
CA4	<i>My alternatives to study are attractive to me (e.g., relaxing, socialising, spending time with friends, sport, etc.).</i>	3.76	1.75	-.03
CA5	<i>My needs for intellectual stimulation and professional development could be fulfilled just as easily by doing something other than studying.</i>	2.33	1.28	-.22
CA6	If I could, I would rather do something other than study.	1.78	1.15	-.54
CA7	There are better things in life than studying.	2.15	1.48	-.36
CA8	Anything else would be better than having to study.	1.78	1.17	-.48
Investment Size				
CI1	I have invested a lot in my studies that would be wasted if I were to quit.	5.57	.94	.29
CI2	<i>Many aspects of my life have become linked to my studies and I would lose all of it if I were to quit (e.g., friendships, relationships, socialising, etc.).</i>	4.59	1.44	.22
CI3	I feel very involved in my studies – like I have put a great deal into it.	5.20	.86	.68
CI4	Compared to others I know, I have invested a great deal of time and effort into my studies.	4.96	.97	.67
CI5	<i>I could use my time better if I did not have to spend so much of it on my studies.</i>	4.46	1.56	.20
CI6	I spend a lot of time on my studies.	4.54	1.22	.73
CI7	I usually put a lot of effort into my studies.	4.83	1.06	.77
CI8	I do a lot to ensure success in my studies.	5.15	1.99	.84
Meaningfulness				
CM1	My studies are very meaningful to me.	5.39	.61	.68
CM2	Being a student allows me to express myself completely.	5.04	.89	.39
CM3	My approach to my studies reflects who I am as a person.	5.11	1.06	.69
CM4	My studies contribute to shaping me as a person.	5.28	.91	.71
CM5	I am the type of person who thrives on studying.	4.46	1.03	.74
CM6	My studies fulfil me.	4.76	1.08	.71
CM7	Studying is a central aspect of who I am.	4.57	1.15	.71
CM8	Studying lends meaning to my life.	4.85	1.05	.64
CM9	I express myself through my studies.	4.59	.96	.63
CM10	Studying is an important part of my life.	5.29	.90	.45

The ACS – Full Scale obtained an Alpha coefficient of .87 (N = 44 items), which I regarded as very good. Items belonging to the Commitment Level subscale (CL3, CL4), the Quality of Alternative scale (CA2, CA3, CA4, CA5) and the Investment Size scale

(CI1, CI2 and CI5) had item-total correlations less than .30 so they were removed (Barnes & Lewin, 2011, p. 235; Burton & Mazerolle, 2011, p. 33). The Quality of Alternatives subscale appeared to be the most problematic with four (nearly half) of the items performing poorly. A possible reason for the poor performance of the four items could be that the wording of items may have led to misinterpretation (Burton & Mazerolle, 2011, p. 29; Johanson & Brooks, 2010, p. 394), causing students to opt for a more tempting, but understandable alternative, such as travel and socialising (CA2, CA3). The removal of these nine items from the ACS improved the reliability of the adapted scale to an Alpha of .92 (N = 35 items), which was regarded as very good.

The reliabilities of the Differentiation of Self Inventory - Revised (DSI-R) and the Authentic and Hubristic 7-Item Pride Scales (AHP) were also calculated. The Differentiation of Self Inventory (DSI-R) obtained an alpha full scale coefficient of .88 (N = 46 items). Item-analysis for the Differentiation of Self Inventory (DSI-R) appears in Table 3.5 below.

Table 3.5 Item-analysis for the Differentiation of Self Inventory (DSI-R) (N = 51, α = .88)

Item no.	Item wording	<i>M</i>	<i>SD</i>	Item Total <i>r</i>
SD1ER	People have remarked that I'm overly emotional	4.24	1.67	.54
SD2EC	I have difficulty expressing my feelings to people I care for	4.37	1.69	.39
SD3EC	I often feel inhibited around my family	3.98	1.63	.32
SD4IP	I tend to remain pretty calm, even under stress	3.98	1.55	.33
SD5FO	I usually need a lot of encouragement from others when starting a job or task	4.12	1.74	.40
SD6ER	When someone close to me disappoints me, I withdraw from him/her for a time	3.37	1.76	.44
SD7IP	No matter what happens in my life, I know that I'll never lose my sense of who I am	5.00	1.16	.44
SD8EC	I tend to distance myself when people get too close to me	4.53	1.71	.36
SD9FO	I want to live up to my parents' expectations of me	1.82	1.32	.04
SD10ER	I wish I weren't so emotional	3.84	1.89	.70

SD11IP	I usually do not change my behaviour simply to please another person	4.84	1.41	.23
SD12EC	My spouse/partner/best friend could not tolerate it if I were to express to him/her my true feelings	4.71	1.66	.42
SD13FO	When my spouse/partner/best friend criticizes me, it bothers me for days	3.41	1.74	.66
SD14ER	At times my feelings get the best of me and I have trouble thinking clearly	3.35	1.69	.72
SD15IP	When I am having an argument with someone, I can separate my thoughts about the issue from my feelings about the person	3.84	1.66	-.00
SD16EC	I'm often uncomfortable when people get too close to me	4.06	1.74	.25
SD17FO	I feel a need for approval from virtually every one in my life	3.55	1.66	.45
SD18ER	At times I feel as if I'm riding an emotional roller-coaster	3.73	1.75	.67
SD19IP	There's no point in getting upset about things I cannot change	4.67	1.46	.45
SD20EC	I'm concerned about losing my independence in intimate relationships	3.39	1.68	.13
SD21ER	I'm overly sensitive to criticism	3.98	1.59	.56
SD22FO	I try to live up to my parents' expectations	1.92	1.46	-.02
SD23IP	I'm fairly self-accepting	4.67	1.20	.28
SD24EC	I often feel that my spouse/partner/best friend wants too much from me	4.49	1.62	.55
SD25FO	I often agree with others just to appease them	3.98	1.66	.37
SD26ER	If I had an argument with my spouse/partner/best friend, I tend to think about it all day	2.80	1.54	.61
SD27IP	I am able to say "no" to others even when I feel pressured by them	4.22	1.72	.19
SD28EC	When one of my relationships becomes very intense, I feel the urge to run away from it	4.14	1.79	.34
SD29FO	Arguments with my parent(s) or sibling(s) can still make me feel awful	2.20	1.40	.25

SD30ER	If someone is upset with me, I can't seem to let it go easily	2.69	1.62	.32
SD31IP	I'm less concerned that others approve of me than I am in doing what I think is right	4.18	1.52	-.07
SD32EC	I would never consider turning to any of my family members for emotional support	4,86	1.49	.21
SD33FO	I often feel unsure when others are not around to help me make a decision	3.76	1.88	.62
SD34ER	I'm very sensitive to being hurt by others	3.24	1.80	.50
SD35IP	My self-esteem really depends on how others think of me	4.20	1.61	.58
SD36EC	When I'm with my spouse/partner/best friend, I often feel smothered	4.84	1.68	.19
SD37FO	When making decisions, I seldom worry about what others will think	3.59	1.44	.05
SD38ER	I often wonder about the kind of impression I create.	2.45	1.40	.40
SD39EC	When things go wrong, talking about them usually makes it worse	4.65	1.68	.30
SD40ER	I feel things more intensely than others do	3.49	1.54	.71
SD41IP	I usually do what I believe is right regardless of what others say	4.84	1.18	.07
SD42EC	Our relationship might be better if my spouse/partner/best friend would give me the space I need	4.55	1.58	.20
SD43IP	I tend to feel pretty stable under stress	3.69	1.66	.44
SD44FO	Sometimes I feel sick after arguing with my spouse/partner./best friend	3.43	1.63	.45
SD45FO	I feel it's important to hear my parents' opinions before making decisions	2.04	1.08	-.19
SD46FO	I worry about people close to me getting sick, hurt, or upset	2.04	1.32	.10

The Differentiation of Self Inventory (DSI-R) obtained an alpha coefficient of $\alpha = .88$ (N = 46 items), which is according to the recommendation of De Vellis (2012, p.108) a very good reliability score for the full scale (.80 to .90). However, 17 items out of a total of 46 items scored below .30 indicating that these items did not provide reliable scores for their particular subscales. A significant amount of items for three of the subscales proved to be

problematic. Six of the 11 items of the I-position subscale provided item-total correlations less than .30 (Barnes, 2011, p. 235; Burton & Mazerolle, 2011, p. 33). The poor performance of more than half of the I-position subscale items (SD11IP, SD15IP, SD23IP, SD27IP, SD31IP, SD41IP) may be ascribed to the fact that most of the 46 items of the full DSI-R scale are posed in the reverse order, whereas only 1 item of the 11 I-position items is posed in the reverse order. This might have confused participants with the result that they scored the items in the opposite direction. Five of the emotional cutoff subscale items (SD16EC, SD20EC, SD32EC, SD36EC, SD42EC) and half of the fusion with others subscale items (SD9FO, SD22FO, SD29FO, SD37FO, SD45FO, SD46FO) performed weakly. It is known from literature that the fusion with others subscale tends to be problematic. The subscale was revised and provided initial evidence of the newly created FO subscale's improved psychometric utility (Skowron & Schmitt, 2003, p. 216). However, it suspected that participants tended to respond to the questions in the opposite direction.

The Authentic and Hubristic Pride Scales (AHP) obtained a lower alpha full scale coefficient of .72 (N = 14 items) in comparison with the ACS and the DSI-R, but still considered acceptable. De Vellis (2012, p. 108) regards an alpha coefficient between .70 and .80 as acceptable. Item-analysis results for the Authentic and Hubristic Pride Scales appears in Table 3.6 below.

Table 3.6 Item-analysis for the Authentic and Hubristic Pride Scales (AHP) (N = 51, α = .72)

Item no.	Item wording	<i>M</i>	<i>SD</i>	Item Total <i>r</i>
PA1	I feel accomplished	3.96	.87	.56
PA2	I feel like I have achieved	4.09	.87	.50
PH3	I feel arrogant	1.54	1.03	.05
PH4	I feel conceited	2.43	1.46	.43
PA5	I feel confident	3.93	1.20	.43
PH6	I feel like I am egotistical	2.20	1.31	.24
PA7	I feel fulfilled	3.91	1.03	.67
PH8	I feel pompous	2.02	1.16	.37
PA9	I feel productive	3.98	.98	.50
PA10	I feel I have self-worth	4.15	1.19	.40
PH11	I feel smug	1.96	1.21	.37
PH12	I feel like I am snobbish	1.35	.64	-.15
PH13	I feel like I am stuck-up	1.35	.71	-.08

Four of the 7 hubristic pride items proved to be problematic. PH3, PH6, PH12 and PH13 obtained item-total correlations less than the required .30 for each item (Barnes, 2011, p. 235; Burton & Mazerolle, 2011, p.33). A possible reason for the poor performance of the four items could be that the wording of the aforementioned 4 hubristic pride items may have led to misinterpretation (Burton & Mazerolle, 2011, p. 29; Johanson & Brooks, 2010, p. 394). It is thus possible that some participants answered the questions randomly or used a trial-error method.

3.5 CONCLUSION

In the present chapter I discussed the development of the new Academic Commitment Scale (ACS) as adapted from the Rusbult et al. (1998) Investment Model Scale of Commitment, which was regarded as the most promising model scale of commitment that could be utilised to study academic commitment (Le & Agnew, 2003). The adaptation process of the ACS from the Investment Model was described in terms of, among others, the adaptation of existing items and the writing of new items. The addition of Meaningfulness as an additional subscale was also addressed. The discussion included a description of the three instruments (see Chapter 1, Section 1.10.2) namely, the newly Academic Commitment Scale (ACS), The Differentiation of Self Inventory - Revised (DSI-R) and the Authentic and Hubristic 7-Item Pride Scales (AHP) that were incorporated in the questionnaire used for the pilot study. The results of the reliability analysis of the pilot study was promising and indicated that the newly created Academic Commitment Scale (ACS), adapted from the original Rusbult et al. investment model scale, is reliable and able to measure commitment in an academic context. The questionnaire also proved to be a useful instrument and was finalised based on the outcome of the pilot study. The reliability, internal consistency and validity of the three scales (ACS, DSI-R and AHP) were tested in the main study and the results thereof are reported in Chapter 4. The analysis of the results of the main study as well as the research questions and hypotheses were addressed in the main study and will be discussed in Chapter 4.

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4.1 INTRODUCTION

The results of the main study are discussed in the present chapter. The Academic Commitment Scale (ACS), adapted from the Investment Model Scale of Rusbult et al. (1998), the Differentiation of Self Inventory-Revised (DSI-R), designed by Skowron and Friedlander (1998) and the Authentic and Hubristic Pride Scales (AHP) of Tracy and Robins (2007d) were used to collect the data for the main study (see Chapter 1, Section 1.10.2). The variables of the three scales were combined in a single questionnaire. The data collection and analyses processes followed were outlined in Chapter 1, Section 1.11. The research questions and hypotheses (see chapter 1, Section 1.8) are addressed in this chapter in respect of the results of reliability, item, factor (EFA) and subgroup analyses. The distribution of scale scores was also tested and Spearman's correlational analysis used to examine the interrelationships between Commitment, Self-differentiation and Pride. The methods used to collect the data for the main study and the analyses of the results are discussed next.

4.2 MAIN STUDY DATA COLLECTION METHODS

4.2.1 INSTRUMENTS

A questionnaire consisting of the variables of the Academic Commitment Scale (ACS), the Differentiation of Self Inventory-Revised (DSI-R) and the Authentic and Hubristic Pride Scales (AHP) were used to collect the data for the main study (see Annexure C). A demographic sheet was attached to the questionnaire to examine the relatedness of demographic factors such as gender, age, home language, year of study and place of residence to academic commitment (see Subquestion 2, Chapter 1, Section 1.8). The demographic sheet also includes self-regulatory behaviours such as learner autonomy, resource allocation and goal setting in order to determine their relatedness to academic commitment. An example of the combined questionnaire used in the main study appears in Annexure C.

4.2.2 PARTICIPANTS

The sample was drawn from two faculties at a South African university as discussed in Chapter 1, Section 1.10.1. Two hundred questionnaires were distributed in the first faculty, of which 121 were eventually returned, yielding an acceptable response rate of 60.5%. However, because the sample consisted of only 18 male participants (14%) and 103 female participants (86%), it was decided to collect additional data to obtain a more equal distribution in respect of gender. One hundred and forty nine questionnaires were distributed once again of which 138 questionnaires were returned. The second sample consisted of 107 male students (77.5%) and 31 female students (22.5%). A high response rate (92.6%) was attained. The final sample data that was analysed consisted of 259 participants of which 125 participants were male (48%) and 134 female (52%). Participants were aged between 18 and 30 years, with approximately 92% aged between 19 and 22 years. With respect to language, most participants were Afrikaans, 123 (47.5%), followed by English, 82 (31.7%), African Languages, 45 (17.3%) and other languages, 9 (3.5%). Descriptive statistics (demographic variables) for the sample are presented in Table 4.1 below.

Table 4.1: Descriptive statistics of the main study sample (N = 259)

	f	%
<i>Gender</i>		
Female	134	51.7
Male	125	48.3
<i>Age in years: N = 259; M = 20.29 years; SD = 2.16 years</i>		
Afrikaans	123	47.5
English	82	31.7
African Languages	45	17.3
Other	9	3.5
<i>In which academic year of study are you at present?</i>		
Second year	213	82.2
Third year	41	15.8
Fourth year	2	0.8
Other	1	0.4
Missing values	2	0.8
<i>Do you live in a residence/commune?</i>		
Yes	122	47.1
No	137	52.9

Participating faculties

Education	121	46.7
Engineering	138	53.3

The next step was to assess the reliability of the instruments in the study. Reliability was assessed by using item analysis and internal consistency procedures as described in Chapter 1, Section 1.11.1). Given an adequate sample size, all instruments were subjected to exploratory factor analysis (EFA) procedures (Fabrigar & Wegener, 2012) described in Chapter 1, Section 1.11.2 to assess the structure of the constructs. The reliability, item and factor analyses of the Academic Commitment Scale (ACS), the Differentiation of Self Inventory-Revised (DSI-R) and the Authentic and Hubristic Pride Scales (AHP) are discussed in the following section.

4.3 ACADEMIC COMMITMENT SCALE (ACS)

4.3.1 RELIABILITY ANALYSIS

An item-analysis was conducted on the adapted Academic Commitment Scale (35 items, including 10 Meaningfulness items), prior to factor analysis to determine reliability and internal consistency. Item Statistics (Annexure D, Table 4.2) and Item-Total Statistics (Annexure D, Table 4.3) indicate very good overall reliability ($\alpha = .89$). Item alphas vary from .89 to .91. All the items scored well above $r = .30$ (majority of items $> .50$) with the exception of the subscale Quality of Alternatives (Corrected Item-Total Correlations: CA1: -.27, CA2: -.33, CA3: -.28 and CA4: -.28). All five ACS subscales displayed good internal consistency: Commitment Level $\alpha = .83$, Meaningfulness $\alpha = .90$, Satisfaction $\alpha = .90$, Quality of Alternatives $\alpha = .80$ and Investment Size $\alpha = .89$. As expected, the Quality of Alternatives items correlated negatively with the other commitment related items, which I took as initial evidence supporting the construct validity of the scale. However, internal consistency alone cannot account for the dimensionality of a scale and therefore Exploratory Factor Analysis (EFA) was conducted to examine the dimensionality as well as the construct validity of the ACS (Burton & Mazerolle, 2011, p. 30). The results of the EFA are discussed in the following section.

4.3.2 FACTOR ANALYSIS

Exploratory Factor Analysis (EFA) was conducted according to the procedures as described in Chapter 1, Section 1.11.2. The first step in conducting the EFA was to identify the appropriate number of factors that would give an initial indication of the model fit of the ACS. Using the Kaiser criterion (Eigenvalue > 1) seven factors were extracted in the initial solution, which were more than anticipated (see Table 4.4 below).

Table 4.4 Initial factor solution for the adapted Academic Commitment Scale (ACS)

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings ^a
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total
1	13.10	37.43	37.43	12.69	36.266	36.27	8.98
2	3.71	10.59	48.02	3.33	9.513	45.78	8.47
3	2.26	6.46	54.48	1.87	5.335	51.11	10.81
4	1.86	5.31	59.79	1.59	4.556	55.67	5.33
5	1.35	3.87	63.66	.94	2.672	58.34	5.53
6	1.16	3.30	66.96	.81	2.300	60.64	6.76
7	1.06	3.01	69.97	.72	2.060	62.70	4.14
8	.80	2.28	72.25				
9	.77	2.20	74.46				
10	.72	2.05	76.51				
11	.66	1.87	78.38				
12	.60	1.71	80.09				
13	.55	1.58	81.67				
14	.50	1.43	83.10				
15	.49	1.41	84.51				
16	.48	1.38	85.89				
17	.46	1.30	87.19				
18	.42	1.21	88.40				

19	.39	1.12	89.52
20	.37	1.05	90.57
21	.33	.95	91.52
22	.33	.93	92.45
23	.31	.89	93.34
24	.28	.79	94.13
25	.27	.77	94.90
26	.25	.70	95.60
27	.22	.64	96.23
28	.20	.58	96.82
29	.19	.55	97.37
30	.18	.51	97.88
31	.17	.49	98.36
32	.16	.45	98.82
33	.15	.43	99.24
34	.14	.39	99.63
35	.13	.37	100.00

Extraction Method: Maximum Likelihood.

Inspection of the pattern matrix (see Table 4.5 below) also suggested too many factors. The items of the five subscales were distributed unevenly between the seven factors. On closer investigation it was revealed that items loading on the various factors were not theoretically sound (Fabrigar & Wegener, 2012), whereby the factor number extraction solution was complicated further. Factors 5 and 6 consisted of only three items each (CA2, CA1, CA4 and CM4, CM3, CM1 respectively), whereas factor 7 consisted of the other two Commitment Level items (CL4, CL5). Meaningfulness and Satisfaction were the only subscales that remained acceptable and relatively intact.

Table 4.5: Pattern matrix for the seven-factor model of the Academic Commitment Scale (ACS)

	Factor						
	1	2	3	4	5	6	7
CM7	<u>.92</u>	.01	-.08	.00	.01	-.08	.08
CM8	<u>.80</u>	.10	-.13	.07	-.10	.04	.04
CM9	<u>.80</u>	-.01	.07	-.04	-.06	.09	-.03
CM5	<u>.76</u>	.04	-.01	-.03	-.03	.09	.05
CS8	<u>.46</u>	.03	.29	.02	.17	-.15	-.09
CM2	<u>.44</u>	-.16	.23	.14	-.03	.26	-.16
CA3	<u>-.40</u>	.02	.15	-.03	-.35	.02	.00
CM6	<u>.39</u>	.03	.31	-.15	-.03	.33	.01
CM10	<u>.35</u>	.11	.01	-.15	.15	.18	.23
CI3	.05	<u>.96</u>	-.11	-.11	-.01	-.06	.03
CI4	.05	<u>.91</u>	-.11	.07	.04	.02	-.10
CI2	.07	<u>.90</u>	-.13	.04	-.05	-.08	.01
CI5	-.06	<u>.74</u>	.05	.04	-.03	.18	-.12
CI1	-.06	<u>.58</u>	.14	-.07	.07	.11	.06
CL2	-.03	<u>.36</u>	.35	.31	-.14	-.07	.08
CS4	-.08	-.12	<u>.91</u>	-.02	-.05	-.02	.06
CS1	.03	-.05	<u>.88</u>	.01	-.15	.00	.02
CS2	.02	-.03	<u>.84</u>	.08	.01	-.09	-.05
CS7	.08	.20	<u>.70</u>	-.21	-.03	-.08	-.100
CS5	-.09	-.07	<u>.66</u>	.04	.06	.24	.00
CS3	.15	-.05	<u>.56</u>	.15	.05	-.18	.09
CS6	.31	.00	<u>.54</u>	.04	.16	-.13	-.06
CL3	.02	.27	<u>.47</u>	.19	-.04	-.08	.11
CL7	.08	-.04	-.14	<u>.99</u>	.04	.03	-.02
CL8	.07	-.05	-.05	<u>.91</u>	.03	.10	-.08
CL6	-.06	.10	.15	<u>.74</u>	.03	-.11	.06
CL1	-.16	-.04	.17	<u>.54</u>	-.01	.16	.12
CA2	-.03	.04	-.02	.02	<u>-.93</u>	.08	-.05
CA1	.01	-.01	.05	-.01	<u>-.88</u>	-.01	.09
CA4	.12	-.02	.05	-.12	<u>-.63</u>	-.15	-.07

	Factor						
	1	2	3	4	5	6	7
CM4	.10	.04	-.19	.08	.00	<u>.77</u>	.04
CM3	.37	-.07	.05	.05	-.05	<u>.54</u>	-.06
CM1	-.10	.26	.26	-.06	.18	<u>.42</u>	.00
CL4	.08	-.11	.08	-.00	.04	-.07	<u>.80</u>
CL5	-.01	.03	-.07	.15	-.05	.15	<u>.60</u>

The reduced matrix eigenvalues were plotted in a graph (see Figure 4.1) and an inspection of the scree plot showed a substantial break after four factors, which indicated that a four-factor model for Academic Commitment Scale would be more appropriate to explain correlations in the data.

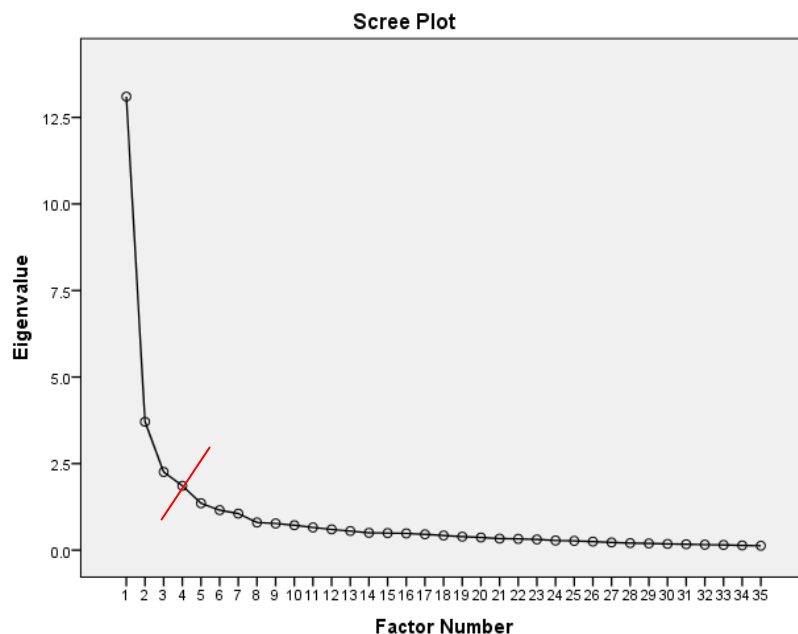


Figure 4.1: Scree plot indicating a four-factor model for the adapted Academic Commitment Scale (ACS)

Next, parallel analysis was used as a more objective statistical criterion in determining the optimal number of factors in comparison with the eigenvalues-greater-than-one rule and the scree plot. As explained in Chapter 1, Section 1.11.2.2, parallel analysis enables the comparison of the eigenvalues data of a sample with the eigenvalues of completely random data (Burton & Mazerolle, 2011, p. 32; Fabrigar & Wegener, 2012, p. 112). Factors of the present analysis could be extracted from a set of random data by

comparing the eigenvalues from a reduced matrix of the real data to eigenvalues of random data. The results of the parallel analysis are presented in Table 4.6 below.

Table 4.6: Parallel analysis of the adapted Academic Commitment Scale (ACS)

Root	Real data	Means	Percentile
1.00	13.10	.96	1.07
2.00	3.71	.85	.93
3.00	2.53	.77	.84
4.00	1.86	.70	.76
5.00	1.35	.64	.70
6.00	1.16	.58	.64
7.00	1.06	.53	.58
8.00	.80	.48	.53
9.00	.77	.44	.49
10.00	.72	.39	.44
11.00	.66	.35	.39
12.00	.60	.31	.35
13.00	.55	.27	.31
14.00	.50	.23	.27
15.00	.49	.19	.23
16.00	.48	.16	.19
17.00	.46	.12	.16
18.00	.42	.09	.12
19.00	.39	.06	.09
20.00	.37	.03	.06
21.00	.33	-.01	.02
22.00	.33	-.04	-.01
23.00	.31	-.07	-.04
24.00	.28	-.10	-.07
25.00	.27	-.13	-.10
26.00	.25	-.15	-.13
27.00	.22	-.18	-.16
28.00	.20	-.21	-.19

Root	Real data	Means	Percentile
29.00	.19	-.24	-.22
30.00	.18	-.27	-.25
31.00	.17	-.10	-.27
32.00	.16	-.33	-.30
33.00	.15	-.36	-.33
34.00	.14	-.39	-.36
35.00	.13	-.43	-.40

From Table 4.6 it is evident that six factors with an eigenvalue > 1 (eigenvalue = 1.07) could be extracted from the random matrix (containing the same number of variables and subjects as the real data) in the parallel analysis. Therefore, six factors were specified in the next step, using a maximum likelihood estimation model, promax rotation. Two model-fit indices, Chi-square and root mean error of approximation (RMSEA), were used to inspect the model fit. The six-factor model appeared to fit the data well. Factor 1 represents the Meaningfulness scale, but without items CM1, CM3 and CM4, which loaded on factor 6. Factor 2 represents Commitment Level, but items CL2, CL3 and CL4 loaded on Satisfaction incorrectly. All the Investment and Quality of Alternatives items loaded correctly on factors 3 and 5 respectively. Satisfaction is represented by factor 4 and all its items, with the exception of CS8 (which loaded on Meaningfulness) loaded correctly on this particular factor. The results of the pattern matrix for the six factor model are presented in Table 4.7 below.

Table 4.7: Pattern matrix for the six-factor model of the Academic Commitment Scale (ACS)

	Factor					
	1	2	3	4	5	6
CM7	<u>.92</u>	.03	.01	-.06	.02	-.08
CM8	<u>.82</u>	.09	.08	-.15	-.08	.04
CM9	<u>.81</u>	-.06	-.01	.04	-.06	.10
CM5	<u>.71</u>	-.05	.03	.06	-.02	.09
CM2	<u>.44</u>	.09	-.16	.10	-.01	.30

CS8	<u>.44</u>	-.05	.02	.30	.19	-.15
CM6	<u>.42</u>	-.13	.04	.29	-.04	.35
CM10	<u>.37</u>	-.03	.12	-.00	.14	.22
CL7	.05	<u>.98</u>	-.07	-.16	.06	.04
CL8	.05	<u>.90</u>	-.08	-.12	.06	.11
CL6	-.06	<u>.73</u>	.08	.13	.06	-.09
CL1	-.12	<u>.63</u>	-.05	.13	-.01	.15
CL5	.05	<u>.40</u>	.08	.09	-.11	.06
CI3	.04	-.09	<u>.93</u>	-.09	-.01	-.03
CI2	.05	.05	<u>.91</u>	-.15	-.05	-.05
CI4	.05	-.00	<u>.88</u>	-.08	.04	-.02
CI5	-.06	-.02	<u>.72</u>	.01	-.01	.20
CI1	-.05	.02	<u>.58</u>	.07	.05	.16
CS4	-.09	.01	-.18	<u>.89</u>	-.05	.04
CS1	.05	.07	-.06	<u>.84</u>	-.15	.02
CS2	.01	.11	-.03	<u>.77</u>	.01	-.03
CS7	.02	-.25	.13	<u>.72</u>	.06	-.02
CS5	-.10	.06	-.10	<u>.65</u>	.07	.28
CS3	.19	.19	.00	<u>.54</u>	.02	-.19
CS6	.30	-.00	-.02	<u>.52</u>	.18	-.11
CL3	.02	.28	.28	<u>.46</u>	-.04	-.06
CL2	-.05	.34	.36	<u>.40</u>	-.13	-.09
CL4	.09	.28	-.03	<u>.32</u>	-.02	-.11
CA2	-.02	.02	-.01	-.02	<u>-.92</u>	.08
CA1	.01	.02	.03	.03	<u>-.85</u>	-.00
CA4	.12	-.14	-.03	.04	<u>-.62</u>	-.14
CA3	-.34	-.01	.03	.11	<u>-.40</u>	.01
CM4	.136	.11	.07	-.13	-.02	<u>.66</u>

CM3	.39	.03	-.03	.00	-.07	<u>.53</u>
CM1	-.09	-.02	.25	.18	.19	<u>.47</u>

In the next step a five-factor solution was attempted, which turned out to fit the data more suitably. An inspection of the pattern matrix (see Table 4.12) shows a clear five-factor model for the ACS consisting of five factors namely Meaningfulness (CM), Commitment Level (CL), Investment Size (CI), Satisfaction (CS) and Quality of Alternatives (CA). All the variables loaded on a different subscale, excluding CL3, which loaded on the CS subscale. Variables CM1, CL2, CL4 and CS8 were deleted from the final scale, because they show cross-correlations with other factors.

The five-factor solution (see Table 4.12) also maintained the expected factor structure of the questionnaire and therefore was chosen as the final solution. The RMSEA output (.0567) suggested a close fit for a five-factor model consisting of Commitment Level (CL), Satisfaction (CS), Quality of Alternatives (CA), Investment Size (CI) and Meaningfulness (CM), which effectively accounted for the correlations among the various measured variables. The Chi-square and RMSEA statistics are presented in Table 4.8 below.

Table 4.8: Results of the adapted Academic Commitment Scale's model-fit indices

Chi-Square	RMSEA = .0567 <i>df</i>	Sig.
585.77	320	.000

The correlations between the five factors in the ACS are presented in the correlation matrix in Table 4.9.

Table 4.9: Correlation matrix for the five-factor model of the adapted Academic Commitment Scale (ACS)

Factor	1	2	3	4	5
1	1.000	.185	.585	.671	.481
2		1.000	.265	.511	.243
3			1.000	.567	.333
4				1.000	.438
5					1.000

The final five-factor model solution is reflected in the pattern matrix presented in Table 4.12 below.

Table 4.12 Pattern matrix for the five-factor model of the adapted Academic Commitment Scale (ACS)

	Factor				
	1	2	3	4	5
CM9	<u>.88</u>	-.08	-.03	-.03	-.05
CM7	<u>.88</u>	-.04	-.02	-.08	.04
CM8	<u>.84</u>	.06	.06	-.16	-.06
CM5	<u>.79</u>	-.07	.01	.03	.01
CM3	<u>.64</u>	.09	.00	.06	-.05
CM2	<u>.59</u>	.11	-.15	.13	-.00
CM6	<u>.59</u>	-.10	.07	.33	-.02
CM10	<u>.49</u>	-.01	.13	.01	.14
CM4	<u>.41</u>	.19	.12	.00	-.03
CL7	.04	<u>.98</u>	-.05	-.14	.04
CL8	.07	<u>.91</u>	-.06	-.07	.03
CL6	-.10	<u>.72</u>	.08	.10	.05
CL1	-.07	<u>.65</u>	-.02	.17	-.03
CL5	.08	<u>.40</u>	.10	.08	-.10
CI3	.00	-.09	<u>.93</u>	-.07	-.01
CI2	-.01	.05	<u>.91</u>	-.13	-.05
CI4	.02	-.00	<u>.87</u>	-.04	.04
CI5	.01	.02	<u>.72</u>	.07	-.01
CI1	.02	.05	<u>.60</u>	.12	.04
CS1	.03	.05	-.04	<u>.87</u>	-.14
CS4	-.04	.02	-.14	<u>.84</u>	-.03
CS2	-.02	.09	-.01	<u>.79</u>	.01
CS7	.03	-.25	.15	<u>.68</u>	.06
CS5	.04	.12	-.04	<u>.67</u>	.07
CS3	.10	.14	.01	<u>.50</u>	.03
CS6	.26	-.02	-.01	<u>.46</u>	.18
CL3	.01	.26	.28	<u>.41</u>	-.02

CA2	.02	.04	.00	-.01	<u>-.93</u>
CA1	.02	.03	.03	-.00	<u>-.85</u>
CA4	.07	-.16	-.05	.00	<u>-.60</u>
CA3	-.35	.01	.05	.12	<u>-.40</u>

4.4 DIFFERENTIATION OF SELF-REVISED (DSI-R)

4.4.1 RELIABILITY AND ITEM-ANALYSIS

The DSI-R full scale consists of 46 items that assess the following dimensions of self-differentiation: Emotional Reactivity (ER, 11 items), I-position (IP, 11 items), Emotional Cutoff (EC, 12 items) and Fusion with Others (FO, 12 items). Internal consistency was calculated using Cronbach's alpha. Results indicated high reliabilities for the DSI-R full scale ($\alpha = .90$) and each of the four subscales: Emotional Reactivity ($\alpha = .86$), Emotional Cutoff ($\alpha = .84$), I-position ($\alpha = .72$) and Fusion with Others ($\alpha = .71$). The IP and FO subscale reliabilities were lower but still acceptable. DSI-R item statistics are presented in Annexure D, Table 4.10. DSI item-total correlations (Annexure D, Table 4.11) for the four subscales ranged from .35 to .66 (Emotional Reactivity), .32 to .58 (Emotional Cutoff) .19 to .51 (I-position) and -.07 to .49 (Fusion with Others). Item-total correlations for Emotional Reactivity and Emotional Cutoff ranged from low to moderate, while the Fusion with Others subscale revealed low correlations, indicating possible difficulty with the construct validity of the scale in the present sample.

4.4.2 FACTOR ANALYSIS

The KMO statistic (.830) and Bartlett's test of sphericity ($df = 1035, p = .000$) indicated that the data could be factor analysed. The first step was to assess the appropriateness of the four-factor model of the original DSI-R. Therefore, four factors were specified and by using the Kaiser criterion (eigenvalue > 1) four factors emerged. Initial eigenvalues are presented in Table 4.13 below.

Table 4.13: Initial factor solution for the Differentiation of Self Inventory-Revised (DSI-R)

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	<u>9.44</u>	20.53	20.53	7.60	16.52	16.52
2	<u>3.34</u>	7.26	27.79	3.45	7.51	24.03

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
3	<u>2.97</u>	6.46	34.24	2.56	5.56	29.59
4	<u>1.72</u>	3.74	37.98	1.44	3.14	32.73
5	1.62	3.53	41.51			
6	1.52	3.31	44.83			
7	1.43	3.12	47.93			
8	1.40	3.04	50.97			
9	1.27	2.75	53.73			
10	1.20	2.61	56.34			
11	1.12	2.44	58.78			
12	1.05	2.28	61.06			
13	1.02	2.21	63.27			
14	.95	2.07	65.34			
15	.94	2.04	67.38			
16	.90	1.96	69.34			
17	.88	1.91	71.24			
18	.80	1.74	72.99			
19	.77	1.68	74.66			
20	.74	1.61	76.28			
21	.70	1.53	77.80			
22	.70	1.52	79.33			
23	.65	1.41	80.73			
24	.62	1.35	82.09			
25	.59	1.29	83.37			
26	.57	1.25	84.62			
27	.56	1.22	85.83			
28	.52	1.13	86.96			
29	.48	1.04	88.00			
30	.47	1.02	89.02			
31	.45	.97	89.99			
32	.44	.95	90.94			
33	.42	.91	91.85			
34	.41	.89	92.74			
35	.39	.84	93.59			
36	.37	.81	94.40			
37	.33	.72	95.12			

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
38	.33	.72	95.84			
39	.31	.68	96.51			
40	.31	.67	97.18			
41	.27	.59	97.77			
42	.26	.57	98.33			
43	.23	.49	98.82			
44	.22	.47	99.29			
45	.21	.46	99.75			
46	.12	.25	100.00			

In the next step the reduced matrix eigenvalues were plotted in a graph (see Figure 4.2 below) and an inspection of the scree plot showed a substantial break after three factors, which indicated that a three-factor model for the Differentiation of Self Inventory would be more appropriate for the analysis of the data in question.

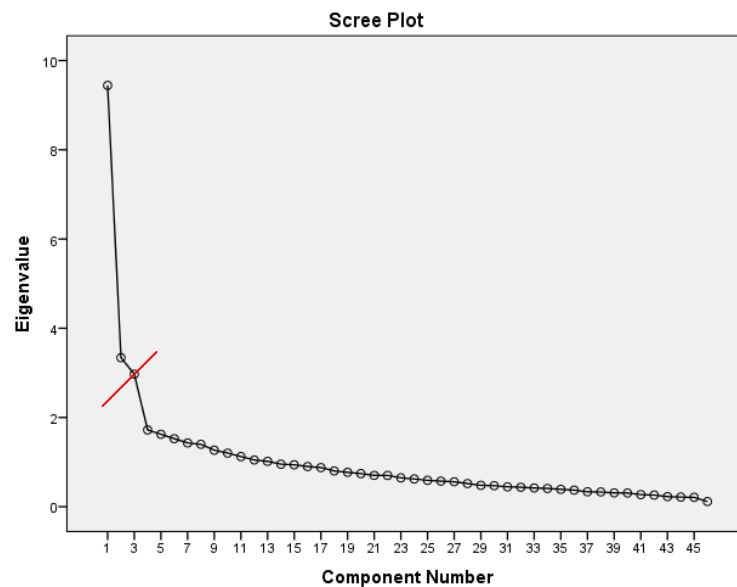


Figure 4.2: Scree plot indicating a three-factor model for the Differentiation of Self Inventory-Revised (DSI-R)

Using a maximum likelihood estimation model (MLE), four factors were specified next in accordance with the original DSI four-factor model created by Skowron and Friedlander (1998). Chi-square and the root mean error of approximation (RMSEA) were used to

inspect the model fit. The four-factor model appeared to fit the data well (Chi-square: 1476.320, $df = 857$, $p = 000$, RMSEA = .0560), but an inspection of the pattern matrix for a four-factor solution (see Table 4.14) indicated that the Fusion with Others (FO) items were problematic because they were distributed among all four factors. Most of the Fusion with Others items loaded on Emotional Reactivity (SD29FO, SD13FO, SD46FO, SD44FO, SD45FO, SD33FO), while three other items (SD17FO, SD25FO, SD37FO) loaded on Emotional Cutoff and the remainder (SD5FO, SD22FO, SD9FO) on I-position.

Table 4.14: Pattern matrix for a four-factor model of the Differentiation of Self Inventory (DSI)

	Factor			
	1	2	3	4
SD26ER	.79	.01	-.26	-.03
SD34ER	.71	-.05	.09	-.05
SD30ER	.68	-.17	.01	-.08
SD14ER	.64	-.03	.13	-.03
SD21ER	.63	.09	.16	-.07
SD29FO	.63	-.09	-.34	.09
SD13FO	.50	.19	.04	-.04
SD46FO	.48	-.16	-.14	.16
SD18ER	.46	.04	.24	.04
SD38ER	.45	.12	-.14	.08
SD1ER	.45	-.09	.25	-.05
SD44FO	.44	.07	-.10	.09
SD10ER	.43	.04	.18	.03
SD40ER	.42	.24	.10	-.03
SD6ER	.35	.30	-.20	.02
SD45FO	.30	-.12	-.20	.30
SD33FO	.30	.12	.20	.13
SD3EC	.30	.22	-.00	-.07
SD17FO	.25	.21	.21	.17
SD24EC	-.09	.68	.10	.05
SD42EC	-.09	.67	-.09	.04
SD39EC	-.14	.66	.10	.10

	Factor			
	1	2	3	4
SD36EC	-.19	.63	.235	.04
SD12EC	-.03	.57	-.028	-.07
SD8EC	.20	.55	-.23	-.10
SD28EC	.10	.54	-.06	-.15
SD20EC	.09	.53	-.03	.00
SD16EC	.22	.50	-.26	-.13
SD2EC	.13	.45	-.05	.00
SD32EC	-.10	.44	-.06	.03
SD25FO	.10	.38	.14	.04
SD37FO	.04	-.34	.16	.01
SD43IP	.18	-.29	.56	-.08
SD23IP	.02	.09	.55	-.01
SD4IP	.24	-.31	.48	.08
SD41IP	-.27	.06	.45	-.01
SD27IP	-.11	.03	.42	-.03
SD15IP	-.00	-.08	.41	-.12
SD19IP	.12	-.05	.39	.07
SD11IP	-.10	-.02	.38	-.07
SD35IP	.26	.26	.35	.12
SD7IP	.11	.04	.30	-.08
SD31IP	-.11	-.12	.29	-.06
SD5FO	.22	.16	.29	-.05
SD22FO	.08	-.01	-.10	.94
SD9FO	-.03	-.01	-.07	.87

To deal with the problematic Fusion with Others (FO) subscale items that loaded incorrectly on all four factors, three factors were specified in the next step, which fit the data more suitably (RMSEA of 0.0576). The problematic Fusion with Others subscale was thus removed from the analysis process for the Differentiation of Self Inventory (DSI-R). The scree plot also indicated a three-factor model as was the case with the four-factor model (see Figure 4.2 above). Therefore, the three-factor solution was chosen as the final solution because it represented the most parsimonious representation of the data. The

statistics of the Chi-square and RMSEA model-fit indices for the three factor model are presented in Table 4.15.

Table 4.15: Results of the Differentiation of Self Inventory's model-fit indices

Chi-square	RMSEA = .0576 df	Sig.
815.73	462	.000

The correlations among the three factors are presented in Table 4.16.

Table 4.16: Correlation matrix for the three-factor model of the Differentiation of Self Inventory (DSI-R)

Factor	1	2	3
1	1.000	.493	.417
2		1.000	.122
3			1.000

The final three-factor solution is reflected in the pattern matrix presented in Table 4.19 below and consists of 34 items without the Fusion with Others items.

Table 4.19: Pattern matrix for the three-factor model of the Differentiation of Self Inventory (DSI-R)

	1	Factor 2	3
SD14ER	<u>.73</u>	-.02	-.01
SD34ER	<u>.72</u>	-.00	.00
SD26ER	<u>.68</u>	.02	-.28
SD21ER	<u>.66</u>	.12	.06
SD18ER	<u>.62</u>	.02	.12
SD1ER	<u>.61</u>	-.11	.07
SD30ER	<u>.59</u>	-.11	-.02
SD10ER	<u>.57</u>	.02	.04
SD40ER	<u>.52</u>	.23	-.02
SD38ER	<u>.43</u>	.13	-.15
SD35IP	<u>.37</u>	.26	.25

	Factor		
	1	2	3
SD3EC	.27	<u>.24</u>	-.01
SD36EC	-.14	<u>.66</u>	.30
SD42EC	-.09	<u>.65</u>	-.03
SD24EC	-.01	<u>.64</u>	.07
SD39EC	-.08	<u>.64</u>	.14
SD28EC	-.00	<u>.58</u>	.06
SD8EC	.12	<u>.57</u>	-.14
SD12EC	-.05	<u>.57</u>	.01
SD20EC	.13	<u>.52</u>	-.05
SD16EC	.15	<u>.49</u>	-.20
SD2EC	.09	<u>.45</u>	.03
SD32EC	-.05	<u>.40</u>	-.07
SD6ER	.30	<u>.31</u>	-.19
SD23IP	.10	.12	<u>.53</u>
SD41IP	-.24	.12	<u>.49</u>
SD43IP	.26	-.21	<u>.48</u>
SD15IP	.01	-.04	<u>.42</u>
SD4IP	.35	-.27	<u>.41</u>
SD27IP	-.06	.05	<u>.40</u>
SD11IP	-.10	.05	<u>.39</u>
SD19IP	.17	-.01	<u>.39</u>
SD31IP	-.12	-.07	<u>.33</u>
SD7IP	.11	.05	<u>.31</u>

An inspection of the pattern matrix revealed that the items of Emotional Reactivity, Emotional Cutoff and I-position loaded on factor 1, factor 2 and factor 3 respectively, with the exception of SD35IP loading on factor 1 (Emotional Reactivity), whereas item SD6ER loaded on Emotional Cutoff (factor 2). Thus, Emotional Reactivity (factor 1), Emotional Cutoff (factor 2) and I-position (factor 3), without the Fusion with Others items, constituted the final three-factor structure of the Differentiation of Self Inventory of the questionnaire.

4.5 AUTHENTIC AND HUBRISTIC PRIDE SCALES (AHP)

4.5.1 RELIABILITY AND ITEM-ANALYSIS

Using the same procedures as with the previous two scales, the Authentic and Hubristic Pride full scale produced an Alpha coefficient of $\alpha = .83$ ($N = 231$). The Authentic Pride scale had an Alpha coefficient of $\alpha = .86$ ($N = 240$) and the Hubristic Pride scale's Alpha coefficient was $\alpha = .84$ ($N = 246$). These reliabilities indicated that the pride full scale and subscales had very good internal consistency. Corrected item-total correlations for the full scale ranged from .32 to .61, whereas the correlations of the Authentic Pride and Hubristic Pride scale items ranged from .34 to .56 and from .32 to .61 respectively. Item-total correlations can thus be considered as moderately acceptable. See Annexure D, Table 4.17 for item statistics and Annexure D, Table 4.18 for item-total statistics.

4.5.2 FACTOR ANALYSIS

The KMO measure (.820) greater than .60 to .70 confirmed sample adequacy and Bartlett's test results ($df = 91$, $p = .000$) indicated that factor analysis for the data was appropriate.

Using the Kaiser-criterion (eigenvalue > 1) four factors were extracted in the initial solution, which were more than the original two-factor model of Tracy and Robins' (2007d) Pride scales. Initial eigenvalues for the Authentic and Hubristic Pride scales' factor solution are presented in Table 4.20.

Table 4.20: Initial factor solution for the Authentic and Hubristic Pride scales

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.37	31.24	31.24	4.37	31.24	31.24
2	2.99	21.35	52.59	2.99	21.35	52.59
3	1.09	7.75	60.33	1.09	7.75	60.33
4	1.00	7.17	67.50	1.00	7.17	67.50
5	.80	5.70	73.20			
6	.64	4.57	77.77			
7	.56	3.98	81.74			

Factor	Initial Eigenvalues			Extraction Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
8	.52	3.71	85.45			
9	.45	3.23	88.68			
10	.40	2.84	91.51			
11	.35	2.50	94.01			
12	.31	2.23	96.24			
13	.29	2.03	98.27			
14	.24	1.73	100.00			

Inspection of the pattern matrix presented in Table 4.21 indicated that the distribution of the Authentic and Hubristic Pride items were problematic as items of both scales loaded on the four factors incorrectly. Authentic variables PA2, PA1 and PA14 loaded on factor 1, PH4, PH11, PH6 and PH8 loaded on factor 2, PH13, PH12 and PH3 loaded on factor 3, whereas factor 4 consists of the authentic variables PA10, PA5, PA7 and PA9. The distribution of Authentic and Hubristic Pride variables is reflected in the pattern matrix in Table 4.21 below.

Table 4.21: Pattern matrix for a four-factor model of the Authentic and Hubristic Pride scales

	Factor			
	1	2	3	4
PA2	<u>.95</u>	-.04	.05	-.13
PA1	<u>.89</u>	.12	-.04	-.07
PA14	<u>.62</u>	.10	-.01	.29
PH4	.19	<u>.90</u>	-.18	-.19
PH11	-.09	<u>.73</u>	.12	.03
PH8	-.05	<u>.73</u>	.08	.20
PH6	-.07	<u>.46</u>	.44	.04
PH13	.02	-.15	<u>.93</u>	-.07
PH12	.02	.06	<u>.87</u>	-.05
PH3	.02	.30	<u>.51</u>	.02
PA10	-.26	.01	-.07	<u>.96</u>

	Factor			
	1	2	3	4
PA5	.12	.18	-.13	<u>.70</u>
PA7	.38	-.18	.12	<u>.55</u>
PA9	.34	-.16	.06	<u>.49</u>

In the next step the reduced matrix eigenvalues were plotted on a graph (Figure 4.3) and an inspection of the scree plot showed a substantial break after two factors, which indicated that a two-factor model for the Authentic and Hubristic Pride Scales would be more suitable for the data in question.

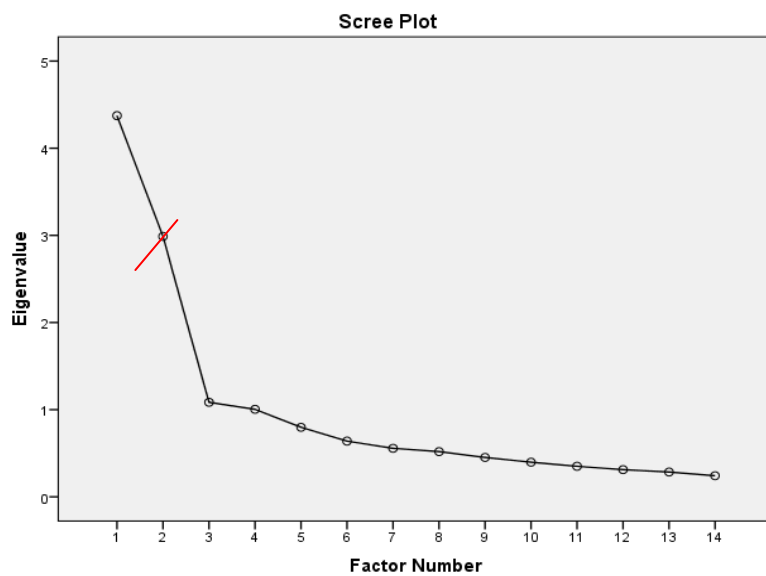


Figure 4.3: Scree plot indicating a two-factor model for the Authentic and Hubristic Pride scales (AHP)

In accordance with the original Authentic and Hubristic Pride Scales (Tracy & Robins, 2007d), a two-factor model was specified, but the RMSEA output (RMSEA = .1229) indicated that this particular model also did not fit the data well in terms of explaining the correlations among the measured variables (Fabrigar & Wegener, 2012, p. 123). Table 4.22 contains the Chi-square and RMSEA statistics.

Table 4.22: Results of the Authentic and Hubristic Pride scale's model-fit indices

RMSEA = .1229		
Chi-Square	<i>df</i>	Sig.
286.58	64	.000

The correlations among the measured variables in a two-factor model are presented in Table 4.23 below.

Table 4.23: Correlation matrix for the two-factor model of the Authentic and Hubristic Pride scales

Factor	1	2
1	1.000	.649
2	.649	1.000

Although the two-factor model did not fit the data well, the Authentic and Hubristic Pride items loaded separately on the two factors as expected (Table 4.24), and therefore the two-factor model was retained as the final solution.

Table 4.24: Pattern matrix for the two-factor model of the Authentic and Hubristic Pride scales

	Factor	
	1	2
PA14	<u>.80</u>	.06
PA1	<u>.74</u>	.05
PA5	<u>.69</u>	.00
PA2	<u>.68</u>	.02
PA7	<u>.67</u>	-.04
PA9	<u>.60</u>	-.07
PA10	<u>.50</u>	-.07
PH12	-.16	<u>.81</u>
PH6	-.01	<u>.69</u>
PH13	-.21	<u>.68</u>
PH3	-.00	<u>.63</u>
PH11	.07	<u>.61</u>

PH8	.23	<u>.58</u>
PH4	.20	<u>.48</u>

Item-correlations ranged from moderate to good. Scale scores were calculated according to the results of the factor analysis before the distribution of scale scores was examined.

4.6 DISTRIBUTION OF SCALE SCORES

In the first step descriptive statistics in terms of the scale mean, 5% trimmed mean, 95% confidence interval, skewness and kurtosis values were used to assess the distribution of scores on all three scales in the study. Descriptive statistics are presented in Table 4.25 below.

Table 4.25: Descriptive statistics of the Academic Commitment, Self-differentiation Inventory and Authentic and Hubristic Pride scales

	Commitment					Self-differentiation			Pride	
	CM	CS	CA	CI	CL	ER	EC	IP	AP	HP
Mean	4.54	4.98	2.73	4.85	5.66	3.69	4.19	4.29	4.02	2.33
5% Trimmed Mean	4.57	5.02	2.69	4.89	5.73	3.70	4.21	4.30	4.06	2.30
Median	4.56	5.00	2.50	5.00	5.80	3.82	4.25	4.36	4.00	2.29
95% Confidence Interval:										
<i>Lower Bound</i>	4.43	4.89	2.60	4.75	5.59	3.56	4.07	4.20	3.94	2.23
<i>Upper Bound</i>	4.65	5.07	2.87	4.95	5.73	3.81	4.31	4.38	4.11	2.43
SD	.86	.73	1.12	.82	.57	.10	.95	.73	.66	.80
Skewness	-.43	-.79	.52	-.42	-4.64	-.15	-.38	-.25	-.88	.45
Kurtosis	.24	1.42	-.26	-.33	32.7	-.53	-.32	-.31	1.61	.14
Frequency	249	257	254	257	257	248	244	255	240	246

CM – Meaningfulness; CS – Satisfaction; CA – Quality of Alternatives; CI – Investment Size; CL – Commitment Level
 ER – Emotional Reactivity; EC – Emotional Cutoff; IP – I-position; FO – Fusion with Others
 AP – Authentic Pride; HP – Hubristic Pride

Overall, it is evident that the scores of the ACS, DSI and AHP scales were not normally distributed. However, the mean and 5% trimmed mean values of the various subscales are relatively the same and well within the 95% confidence interval boundaries, indicating

that possible outliers did not exercise an extreme negative influence on the distribution of the data.

Most of the scores of the various subscales are negatively skewed, indicating a clustering of scores to the right. The kurtosis values of more than half of the 11 subscales of the ACS presented in Table 4.25 are below 0, indicating a tendency for the distribution to be relatively flat. Using kurtosis values to assess the normality of the distribution of scale scores may lead to an underestimation of the variance, but in a large sample the negative effect can be neutralised to some extent (Pallant, 2011). The histograms (graphical method) of each subscale of the ACS were visually inspected next in order to determine the shape of the distribution (Annexure E, Figure 4.5). Inspection of the histograms revealed that the distribution of the Commitment Level was especially problematic. Values were negatively skewed indicating that values clustered at the high end of the right hand side of the histogram (Pallant, 2011). The tendency of the distribution of all the scale scores towards non-normality was confirmed.

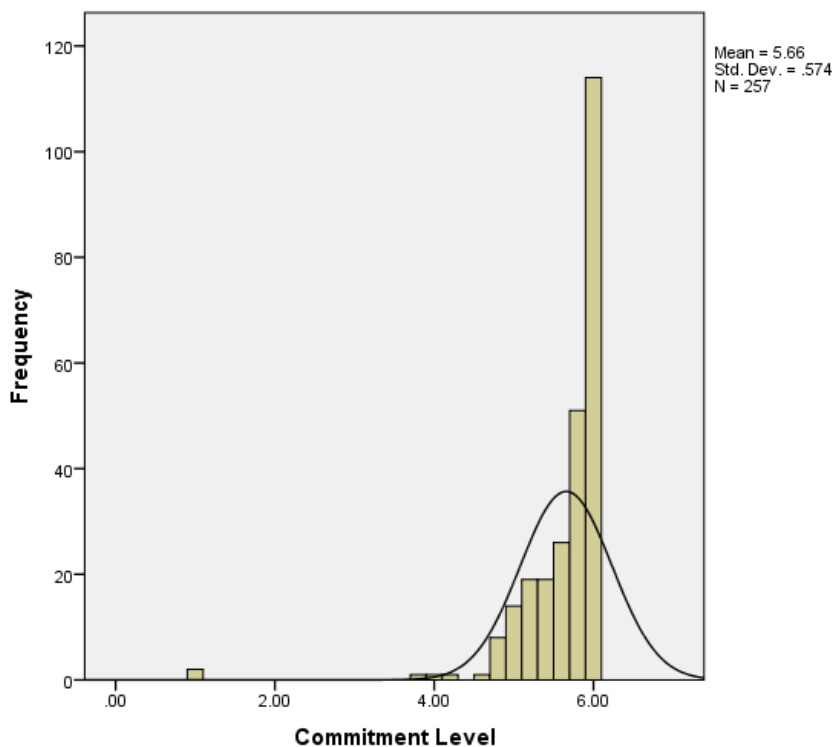


Figure 4.4: Histogram indicating the distribution of the Commitment Level variables

Descriptive statistics (including skewness and kurtosis inspection) provided information about the characteristics of the sample and the distribution of scale scores in the present

study. A visual inspection of histograms provided information about the shape of the distribution (Pallant, 2011). The histograms appear in Annexure E. The outcome of these procedures can be regarded as a preliminary analysis of the distribution of data. Therefore, before reaching a final conclusion about the distribution of data, I decided to conduct a more formal statistical procedure to test for normality. In a recent study Razali and Wah (2011) compared the power of four tests used to determine normality, namely the Shapiro-Wilk, Kolmogorov-Smirnov, Lilliefors and Anderson-Darling tests. Their findings indicated that Shapiro-Wilk is the most powerful test and Kolmogorov-Smirnov the least powerful (Razali & Wah, 2011, p.32). The Shapiro-Wilk test was found to be most suitable for a variety of distributions and sample sizes, other than small sample sizes (Razali & Wah, 2011, p.32). Based on these findings, I decided to use Shapiro-Wilk as a “theory driven method” (Razali & Wah, 2011, p. 22) to test the normality of the distribution of scale scores in the present study. The results are presented in Table 4.26.

Table 4.26: Results of the Kolmogorov-Smirnov and Shapiro-Wilk tests for normality of the distribution of scale scores

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
CMtot	.05	249	.200*	.98	249	.001
CStot	.09	257	.000	.95	257	.000
CAtot	.11	254	.000	.96	254	.000
Cltot	.09	257	.000	.96	257	.000
CLtot	.28	257	.000	.58	257	.000
ER	.07	248	.008	.99	248	.027
EC	.05	244	.086	.98	244	.005
IP	.05	252	.076	.99	252	.069
AP	.12	240	.000	.94	240	.000
HP	.06	246	.019	.98	246	.000

* Lower bound of true significance

* Sig. $p > .05$

From Table 4.26 it is evident that the distribution of all scale scores is non-normal. On the Shapiro-Wilk test only the subscale I-position (IP: $W = .990$, $df = 252$, $p = .069$) was not significant, indicating normal distribution. Based on these results, I decided to use nonparametric statistics to examine the differences between groups. The nonparametric Spearman’s rho was used to evaluate correlations between the scales, while the Mann-

Whitney U-Test was utilised to measure differences in the means of two groups. The Kruskal-Wallis test was used to assess differences in groups of three or more.

4.7 CORRELATIONAL ANALYSIS

Correlational analyses were used to address the first subquestion of the present study namely, *How are pride, self-differentiation and commitment related in university students?* (see Section 1.8.2), combined with the first set of hypothesis (see Section 1.8.3).

Spearman's (*rho*) nonparametric correlational coefficient (*rs*) was used to investigate the statistical relationships between Meaningfulness (CM), Satisfaction (CS), Quality of Alternatives (CA), Investment Size (CI), Commitment Level (CL), Emotional Reactivity (ER), Emotional Cutoff (EC), I-position (IP), Authentic Pride (AP) and Hubristic Pride (HP) subscale variables of the instruments. The results are presented in Table 4.27 below.

Table 4.27: Spearman's correlational analysis of Commitment, Self-differentiation and Pride subscales

		Commitment					Self-differentiation			Pride	
		CM	CS	CA	CI	CL	ER	EC	IP	AP	HP
CM	Spearman's σ	1.00	.69***	-.46***	.54***	.33***	.10	.02	.20**	.51***	.10
	95% Lower	1.00	.61	-.58	.41	.20	-.05	-.13	.06	.39	-.06
	95% Upper	1.00	.77	-.32	.64	.46	.26	.18	.35	.62	.25
CS			1.00	-.43***	.56***	.42***	.22**	.20**	.31***	.54***	.06
	95% Lower		1.00	-.55	.45	.28	.08	.07	.17	.43	-.08
	95% Upper		1.00	-.29	.66	.53	.36	.34	.44	.65	.20
CA				1.00	-.31***	-.16*	-.17*	-.12*	-.11	-.35***	.03
	95% Lower			1.00	-.44	-.30	-.30	-.26	-.25	-.49	-.12
	95% Upper			1.00	-.16	-.03	-.02	.03	.03	-.20	.17
CI					1.00	.39***	.10	.18*	.20**	.41***	-.07
	95% Lower				1.00	.26	-.04	.06	.05	.27	-.23
	95% Upper				1.00	.52	.25	.32	.35	.54	.06
CL						1.00	.13	.16*	.24**	.30***	-.11
	95% Lower					1.00	-.01	.02	.11	.16	-.25
	95% Upper					1.00	.27	.30	.38	.43	.05
ER							1.00	.50***	.42***	.36***	-.20**
	95% Lower						1.00	.39	.28	.21	-.32
	95% Upper						1.00	.60	.54	.49	-.05

EC		1.00	.22**	.26***	-.33***
95% Lower		1.00	.08	.10	-.47
95% Upper		1.00	.35	.40	-.18
IP		1.00	.49***		-.03
95% Lower		1.00	.40		-.18
95% Upper		1.00	.59		.12
AP				1.00	.10
95% Lower				1.00	-.05
95% Upper				1.00	.25
HP					1.00
95% Lower					1.00
95% Upper					1.00

Correlation significance levels: * $p < .05$, ** $p < .01$, *** $p < .001$ (2-tailed)

In terms of the ACS, Spearman correlations (r_s) were generally moderate. Commitment Level was moderately correlated with Meaningfulness ($r_s = .33, p < .001$), Satisfaction ($r_s = .42, p < .001$) and Investment Size ($r_s = .39, p < .001$). As expected, Quality of Alternatives showed an inverse relationship with Meaningfulness ($r_s = -.46, p < .001$), Satisfaction ($r_s = -.43, p = .001$), Investment Size ($r_s = .31, p = .001$) and Commitment Level ($r_s = -.16, p < .05$). Meaningfulness was strongly correlated with satisfaction ($r_s = .69, p < .001$), indicating that they share a common source of variance. However, the correlation is not strong enough for them to be regarded as the same construct. Meaningfulness also correlated significantly with I-position ($r_s = .20, p < .01$) and Authentic Pride ($r_s = .51, p < .001$), but not with Hubristic Pride or the other self-differentiation constructs. Quality of Alternatives was negatively correlated with Emotional Reactivity ($r_s = -.17, p < .05$), Emotional Cutoff ($r_s = -.12, p < .05$) and negatively correlated with Authentic Pride ($r_s = -.35, p < .001$). In a similar vein, Investment Size correlated significantly with Commitment Level ($r_s = .16, p < .05$) and I-position ($r_s = .20, p < .01$), as well as with Authentic Pride ($r_s = .41, p < .001$). The correlations between Commitment Level and Emotional Cutoff ($r_s = .16, p < .05$), I-position ($r_s = .24, p < .01$) and Authentic Pride ($r_s = .30, p < .001$) were significant positive, but the correlations were relatively low.

Generally, the pattern of correlations for commitment variables is in line with correlations usually reported for the Investment Model Scale of Commitment (Rusbult et al., 1998; Le & Agnew, 2003), which I interpret as evidence that the original structure of the Investment

Model was largely retained in the Academic Commitment Scale (ACS). Satisfaction correlated with Emotional Reactivity ($r_s = .22, p < .01$), Emotional Cutoff ($r_s = .20, p < .01$) and I-position ($r_s = .31, p < .001$), but the correlations were relatively weak. However, as expected, Satisfaction revealed a strong correlation with Authentic Pride ($r_s = .54, p < .001$). Significant correlations also emerged between Authentic Pride and Emotional Reactivity ($r_s = .36, p < .001$) and Authentic Pride and Emotional cutoff ($r_s = .26, p < .001$), but the correlations were also relatively weak.

With respect to the self-differentiation constructs, correlations among the self-differentiation subscales of the DSI-R were acceptable. Emotional Reactivity correlated significantly with Emotional Cutoff ($r_s = .50, p < .001$) and I-position ($r_s = .42, p < .001$), while Emotional Cutoff correlated significantly with I-position ($r_s = .22, p < .01$). As expected Authentic Pride correlated significantly with I-position ($r_s = .49, p < .001$).

No significant correlations were found between hubristic pride and all the scale variables of commitment. Authentic pride and hubristic pride also did not correlate significantly with each other.

4.8 SUBGROUP ANALYSES

4.8.1 INTRODUCTION

Subgroups analyses targeted the second and third subquestions of the present study, namely:

1. *Are demographic factors such as gender, age, home language, academic year of study and place of residence related to students' level of commitment?*
2. *Are self-regulatory factors such as learner autonomy (study management, satisfaction with study course), resource allocation (study time, social networking, part-time job, family support) and goal setting (learning and life goals) related to students' level of commitment?*

Self-regulatory learner behaviours include questions related to preparedness for university studies, study management, learning goals, satisfaction with study course, life goals, social networking, part-time job and family support. As the distribution of scores of the Academic Commitment Scale (ACS), Differentiation of Self Inventory (DSI-R) and Authentic and Hubristic Pride scales (AHP) are not normally distributed (see Section 4.6), the non-parametric Independent Samples Mann-Whitney U Test (Pallant, 2011) was used

to compare mean ranks of male and female participants on demographic factors and self-regulatory learner behaviours consisting of two groups. Test statistics were examined to determine significance/non-significance (z - and p -values) of group differences. Males and females were roughly equally distributed.

4.8.2 GENDER

In terms of Meaningfulness (CM), Quality of Alternatives (CA), Commitment Level (CL), Emotional Cutoff (EC) and Authentic Pride (AP), no significant differences were recorded between men and women and therefore the null hypothesis was retained for these variables. Significant differences between men and women were recorded for Satisfaction (CS), Investment Size (CI), Emotional Reactivity (ER), I-position (IP) and Hubristic Pride (HP), and thus for these variables the null hypothesis was rejected in favour of the alternative hypothesis. The gender hypothesis test summary (SPSS-data) for 10 subscales (SPSS output) of the Academic Commitment Scale (ACS) are presented in Table 4.29 below and mean ranks are presented in Annexure D, Table 4.28.

Table 4.29: Hypothesis Test Summary of gender differences

	Null Hypothesis	Test	Sig.	Decision
1	Distribution of Meaningfulness is the same across categories of sex	Mann-Whitney U	.119	Retain null hypothesis
2	Distribution of Satisfaction is the same across categories of sex	Mann-Whitney U	.039	Reject null hypothesis
3	Distribution of Quality of Alternatives is the same across categories of sex	Mann-Whitney U	.152	Retain null hypothesis
4	Distribution of Investment is the same across categories of sex	Mann-Whitney U	.031	Reject null hypothesis
5	Distribution of Commitment Level is the same across categories of sex	Mann-Whitney U	.173	Retain null hypothesis
6	Distribution of Emotional Reactivity is the same across categories of sex	Mann-Whitney U	.022	Reject null hypothesis
7	Distribution of Emotional Cutoff is the same across categories of sex	Mann-Whitney U	.204	Retain null hypothesis
8	Distribution of I-position is the same across categories of sex	Mann-Whitney U	.013	Reject null hypothesis
9	Distribution of Authentic Pride is the same across categories of sex	Mann-Whitney U	.336	Retain null hypothesis
10	Distribution of Hubristic Pride is the	Mann-Whitney U	.000	Reject null hypothesis

same across categories of sex

Sig. level < .05

Women reported higher test scores for Satisfaction ($z = -2.07, p = .04$) and Investment Size ($z = -2.16, p = .03$). Surprisingly, male participants reported significantly greater Emotional Reactivity than did females ($z = -2.28, p = .02$), but male participants scored higher on I-position ($z = -2.48, p = .01$) and Hubristic Pride ($z = -4.22, p = .000$). Test statistics for gender differences with regard to the subscales of the ACS are presented in Table 4.31 below.

Table 4.31: Test statistics of gender differences

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Meaningfulness	6850.00	13990.00	-1.56	.119
Satisfaction	7017.00	14767.00	-2.07	.039
Quality of Alternatives	7225.00	15740.00	-1.43	.152
Investment Size	6970.50	14845.50	-2.16	.031
Commitment Level	7471.00	15097.00	-1.36	.173
Emotional Reactivity	6394.50	14522.50	-2.28	.022
Emotional Cutoff	6734.00	13755.00	-1.27	.204
I-position	6500.00	14885.00	-2.48	.013
Authentic Pride	6684.50	13824.50	-.96	.336
Hubristic Pride	5208.50	13336.50	-4.22	.000

4.8.3 AGE

Age groups were categorised into two separate groups, namely 19-22 years and 23-30 years. No significant differences were found between the two groups. Mean ranks for age groups are presented in Annexure D, Table 30. Test statistics for age group differences are presented in Table 4.33 below.

Table 4.33: Test statistics of age group differences

	Chi-Square	df	Asymp. Sig.
Meaningfulness	1.20	2	.549
Satisfaction	3.71	2	.156
Quality of Alternatives	1.14	2	.567
Investment Size	1.28	2	.528

Commitment Level	.93	2	.627
Emotional Reactivity	5.07	2	.079
Emotional Cutoff	1.97	2	.374
I-position	1.68	2	.431
Authentic Pride	4.62	2	.099
Hubristic Pride	.13	2	.935

Kruskal Wallis Test

4.8.4 HOME LANGUAGE

African and other language groups only represented 17% of the sample and it was decided to compare only the Afrikaans and English speaking groups (see Annexure D, Table 4.32 for mean rank statistics). Significant differences were found between Afrikaans and English speaking groups on Home Language in terms of Emotional Cutoff ($z = -2.26, p < .024$) and Hubristic Pride ($z = -4.77, p < .000$). Afrikaans speaking participants reported higher Emotional Cutoff and Hubristic Pride than English speaking participants. Test statistics for language differences between Afrikaans and English speaking participants are presented in Table 4.35 below.

Table 4.35: Test statistics of home language differences

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Meaningfulness	4503.00	7906.00	-.83	.405
Satisfaction	4836.50	12339.50	-.40	.688
Quality of Alternatives	4645.50	11905.50	-.53	.594
Investment Size	4591.00	12094.00	-.86	.391
Commitment Level	4421.50	12047.50	-1.44	.150
Emotional Reactivity	4548.50	11688.50	-.53	.595
Emotional Cutoff	3641.00	10544.00	-2.26	.024
I-position	4573.50	12199.50	-.70	.482
Authentic Pride	4177.50	7103.50	-.71	.477
Hubristic Pride	2699.00	5780.00	-4.77	.000

4.8.5 ACADEMIC YEAR OF STUDY

As academic year of study is related to the age of participants and in view of the fact that no significant differences between the different age subgroups were reported, no additional analysis was conducted for academic year of study.

4.8.6 PLACE OF RESIDENCE

No significant differences were found on any of the study variables whether students lived in a home residence, in communes or university residences. Ranks for place of residence are presented in Annexure D, Table 4.34 and test statistics in Table 4.37 below.

Table 4.37: Test statistics of place of residence differences

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Meaningfulness	7525.50	16436.50	-.33	.739
Satisfaction	8057.50	15317.50	-.27	.784
Quality of Alternatives	7751.00	16931.00	-.48	.629
Investment Size	7878.00	15259.00	-.59	.555
Commitment Level	7598.00	14858.00	-1.10	.271
Emotional Reactivity	7273.00	15788.00	-.70	.481
Emotional Cutoff	6543.00	13446.00	-1.61	.107
I-position	7150.50	16195.50	-1.31	.190
Authentic Pride	6409.00	14410.00	-1.44	.149
Hubristic Pride	7424.00	15809.00	-.22	.826

4.8.7 PREPAREDNESS FOR UNIVERSITY STUDIES

Significant differences were found between those who felt prepared versus those who did not for Satisfaction ($z = -3.64, p < .000$), Commitment Level ($z = -2.21, p < .027$), Emotional Cutoff ($z = -2.47, p < .014$) and Authentic Pride ($z = -3.88, p < .000$). Participants who felt prepared for university studies reported higher means on Satisfaction, Commitment Level, Emotional Cutoff and Authentic Pride. Mean ranks for preparedness for university studies are presented in Annexure D, Table 4.36. See Table 4.39 below for test statistics.

Table 4.39: Test statistics of preparedness for university differences

	Mann-Whitney U	Wilcoxon W	Z	AsympSig. (2-tailed)
Meaningfulness	2645.00	3240.00	-2.59	.010
Satisfaction	2324.00	2919.00	-3.64	.000
Quality of Alternatives	3207.00	27517.00	-1.34	.180
Investment Size	3218.00	3848.00	-1.64	.101
Commitment Level	3025.50	3655.50	-2.21	.027
Emotional Reactivity	3091.00	3721.00	-1.62	.105
Emotional Cutoff	2627.50	3222.50	-2.47	.014
I-position	3014.50	3609.50	-1.75	.080
Authentic Pride	2050.50	2645.50	-3.88	.000
Hubristic Pride	3362.50	25940.50	-.63	.530

4.8.8 STUDY MANAGEMENT

Significant differences were reported in terms of Meaningfulness ($z = -3.48, p < .001$), Satisfaction ($z = -4.76, p < .000$), Quality of Alternatives ($z = -2.02, p < .043$), Investment Size ($z = -4.59, p < .000$), Commitment Level ($z = -2.22, p < .026$), I-position ($z = -2.90, p < .004$) and Authentic Pride ($z = -4.60, p < .000$). Participants who felt they managed their studies effectively, scored significantly higher on Meaningfulness, Satisfaction, Investment Size, Commitment Level, I-position, Emotional Cutoff ($z = -2.23, p < .026$) and Authentic Pride. Alternatives were negatively associated with commitment subscales in terms of Meaningfulness, Satisfaction, Investment Size, I-position and Authentic Pride. Descriptive statistics are presented in Annexure D, Table 4.38. See Table 4.41 below for test statistics.

Table 4.41: Test statistics of study management differences

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Meaningfulness	4194.50	6274.50	-3.48	.001
Satisfaction	3833.50	6044.50	-4.76	.000
Quality of Alternatives	5113.00	23068.00	-2.02	.043
Investment Size	3925.50	6136.50	-4.59	.000
Commitment Level	5261.50	7539.50	-2.22	.026
Emotional Reactivity	4588.00	6668.00	-2.63	.009
Emotional Cutoff	4573.00	6526.00	-2.23	.026

I-position	4662.00	6873.00	-2.90	.004
Authentic Pride	3539.50	5750.50	-4.60	.000
Hubristic Pride	5756.50	22046.50	-.37	.710

4.8.9 LEARNING GOALS

Significant differences were reported on Meaningfulness ($z = -2.06, p < .039$), Satisfaction ($z = -3.69, p < .000$), Quality of Alternatives ($z = -3.74, p < .000$), Investment Size ($z = -3.50, p < .000$) and Commitment Level ($z = -2.27, p < .023$). Students who reported that they set learning goals for themselves scored significantly higher means. Mean ranks are presented in Annexure D, Table 4.40. See Table 4.43 below for test statistics.

Table 4.43: Test statistics of learning goal differences

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Meaningfulness	3320.00	4140.00	-2.06	.039
Satisfaction	2891.50	3794.50	-3.69	.000
Quality of Alternatives	2761.00	25552.00	-3.74	.000
Investment Size	2905.50	3766.50	-3.50	.000
Commitment Level	3565.00	4468.00	-2.27	.023
Emotional Reactivity	3910.00	25231.00	-.98	.326
Emotional Cutoff	3496.00	24611.00	-1.24	.214
I-position	4383.50	26538.50	-.06	.951
Authentic Pride	3666.50	4527.50	-1.02	.306
Hubristic Pride	3988.00	25309.00	-.32	.748

4.8.10 SATISFACTION WITH STUDY COURSE

Significant differences were reported on Meaningfulness ($z = -3.32, p < .001$), Satisfaction ($z = -4.79, p < .000$), Investment Size ($z = -3.16, p < .002$), Commitment Level ($z = -2.48, p < .013$), Authentic Pride ($z = -2.69, p < .007$) and Hubristic Pride ($z = -2.17, p < .030$). Students who felt satisfied with their studies reported significant higher means on Meaningfulness, Satisfaction, Investment Size, Commitment Level, Authentic Pride and Hubristic Pride. Quality of Alternatives and Hubristic Pride negatively correlated with commitment in terms of satisfaction with study course. Mean ranks are presented in Annexure D, Table 4.42. See Table 4.45 below for test statistics.

Table 4.45: Test statistics of satisfaction with study course differences

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Meaningfulness	1499.50	1775.50	-3.32	.001
Satisfaction	1060.50	1336.50	-4.79	.000
Quality of Alternatives	2077.50	28873.50	-1.42	.156
Investment Size	1612.50	1888.50	-3.16	.002
Commitment Level	1880.00	2156.00	-2.48	.013
Emotional Reactivity	2012.00	2265.00	-1.45	.148
Emotional Cutoff	2414.50	26945.50	-.05	.958
I-position	1931.00	2184.00	-1.81	.070
Authentic Pride	1477.50	1708.50	-2.69	.007
Hubristic Pride	1853.50	2129.50	-2.17	.030

4.8.11 LIFE GOALS

Significant differences were reported on Meaningfulness ($z = -2.57, p = .010$), Quality of Alternatives ($z = -2.32, p = .020$) and Commitment Level ($z = -2.81, p = .005$), indicating that those who reported the presence of life goals scored higher on Meaningfulness and Commitment Level. This is an indication that Meaningfulness and Commitment Level are statistically positively related to commitment. Higher rank means were reported by students who tend to choose alternatives, indicating lower levels of commitment. Mean ranks are presented in Annexure D, Table 4.44. See Table 4.47 below for test statistics.

Table 4.47: Test statistics of life goals differences

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Meaningfulness	885.00	976.00	-2.57	.010
Satisfaction	1144.00	1235.00	-1.70	.090
Quality of Alternatives	970.00	30131.00	-2.32	.020
Investment Size	1320.00	1411.00	-1.02	.306
Commitment Level	798.50	876.50	-2.81	.005
Emotional Reactivity	1490.50	29220.50	-.15	.883
Emotional Cutoff	1295.50	1373.50	-.41	.686
I-position	1474.00	1565.00	-.31	.756
Authentic Pride	1028.00	1094.00	-1.03	.302
Hubristic Pride	1398.00	1489.00	-.47	.640

4.8.12 SOCIAL NETWORKING

In terms of social networking, no significant differences were found whether students spent time on social networking or not. Mean ranks for social networking are presented in Annexure D, Table 4.46. See Table 4.49 below for test statistics.

Table 4.49: Test statistics of social networking differences

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Meaningfulness	1367.50	29570.50	-.22	.823
Satisfaction	1562.50	31452.50	-.09	.928
Quality of Alternatives	1200.50	1291.50	-1.42	.155
Investment Size	1577.00	31467.00	-.04	.972
Commitment Level	1440.50	31575.50	-.12	.902
Emotional Reactivity	1219.00	1297.00	-.81	.416
Emotional Cutoff	946.00	1012.00	-1.47	.142
I-position	1231.50	1309.50	-.85	.397
Authentic Pride	1246.50	1337.50	-.94	.345
Hubristic Pride	1154.50	28649.50	-1.04	.298

4.8.13 STUDY TIME

Three groups were formed to compare differences on study time (0-60 minutes, 60-120 minutes, 120 minutes or more). The Kruskal Wallis Test was used to compare the three groups. Significant differences were reported for Investment Size ($\chi^2 = 41.45$, $df = 2$, $p = .000$) and Commitment Level ($\chi^2 = 7.71$, $df = 2$, $p = .021$). The group that spent 120 minutes or more on studying reported higher mean scores on Investment Size and Commitment Level. Mean ranks for study time are presented in Annexure D, Table 4.48. See Table 4.51 below for test statistics.

Table 4.51: Test statistics of study time differences

	Chi-Square	df	Asymp. Sig.
Meaningfulness	4.78	2	.092
Satisfaction	3.85	2	.146
Quality of Alternatives	4.47	2	.107
Investment Size	41.45	2	.000
Commitment Level	7.71	2	.021

Emotional Reactivity	1.01	2	.605
Emotional Cutoff	.76	2	.685
I-position	.13	2	.937
Authentic Pride	2.48	2	.289
Hubristic Pride	.41	2	.814

Kruskal Wallis Test

4.8.14 PART-TIME JOB

No significant differences were reported on any of the study variables, indicating that it did not make a difference whether participants worked part-time or not. The null hypothesis was retained. Mean ranks for part-time job are presented in Annexure D, Table 4.50. See Table 4.53 below for test statistics.

Table 4.53: Test statistics of part-time job differences

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Meaningfulness	5263.00	23408.00	-.71	.479
Satisfaction	5701.50	25204.50	-.42	.678
Quality of Alternatives	5664.00	7494.00	-.32	.753
Investment Size	5328.00	7158.00	-1.16	.246
Commitment Level	5480.50	25181.50	-.76	.449
Emotional Reactivity	5173.50	23701.50	-.43	.668
Emotional Cutoff	5074.00	23219.00	-.12	.903
I-position	5477.00	24198.00	-.44	.658
Authentic Pride	4893.50	21729.50	-.71	.480
Hubristic Pride	5023.00	23359.00	-.49	.621

4.8.15 FAMILY SUPPORT

Significant differences were reported on Emotional Cutoff ($z = -3.36$, $p = .001$), with participants who felt they did not enjoy the support of their family generally reporting higher mean scores for Emotional Cutoff and Hubristic Pride. Mean ranks for family support are presented in Annexure D, Table 4.52. See Table 4.54 below for test statistics.

Table 4.54: Test statistics of family support differences

	Mann-Whitney U	Wilcoxon W	Z	Asymp. Sig. (2-tailed)
Meaningfulness	1377.50	29343.50	-.62	.535
Satisfaction	1605.50	1710.50	-.35	.723
Quality of Alternatives	1576.00	30496.00	-.39	.696
Investment Size	1429.00	1534.00	-1.01	.312
Commitment Level	1292.50	31182.50	-1.18	.237
Emotional Reactivity	1345.00	1436.00	-.73	.468
Emotional Cutoff	590.50	668.50	-3.36	.001
I-position	1230.50	1321.50	-1.26	.207
Authentic Pride	1543.50	27194.50	-.15	.878
Hubristic Pride	854.50	28115.50	-2.65	.008

4.9 CONCLUSION

The results of the main study were reported in this chapter. The scale properties of the instruments in the present study were described by referring to item analyses used to assess the reliability and internal consistency of the Academic Commitment Scale (ACS), the Differentiation of Self Inventory-Revised (DSI-R) and the Authentic and Hubristic Pride Scales (AHP). To determine the appropriate number of factors for each scale, Exploratory Factor Analysis (EFA) was conducted, using the Kaiser criterion, graphical methods and parallel analysis, aimed at establishing construct validity. The research questions and hypotheses were then addressed. Spearman's (*rho*) rank correlation coefficient was used to investigate the relationships between commitment and its correlates self-differentiation and pride. To examine the role of demographic factors and self-regulatory learner behaviours, subgroup analyses were conducted. Data was not normally distributed and therefore it was decided to use nonparametric statistics. Conclusions in terms of the discussion of results, limitations, contributions of the study and recommendations for future research will be discussed in Chapter 5.

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CHAPTER 5

DISCUSSION OF RESULTS, CONTRIBUTION, LIMITATIONS AND RECOMMENDATIONS

5.1 INTRODUCTION AND OVERVIEW

In the present study commitment was examined in an academic context based on the assumption that self-regulatory learning is essentially an identity-related process wherein the self acts as the main role player to consciously control behaviour (Human-Vogel, 2013). In applicable literature the self is portrayed as a responsive agent displaying its own unique identity capable of initiating, changing, guiding and controlling behaviour (Baumeister & Vohs, 2003; Lord et al., 2010, p.546). In the present study the self is represented by self-differentiation as an identity-related construct (Skowron & Friedlander, 1998). I also subscribe to Human-Vogel's (2013) view, conceptualising commitment as identity-level self-regulation. Human-Vogel (2013) approaches the role of the self from a teleological (future-directed) perspective which involves future-oriented self-construals, providing identity-level self-regulatory commitment with the necessary coherence and consistency. The pride construct was also brought into the study to determine to what extent a positive self-relevant emotion such as pride (Tangney, 2005; Tracy & Robins, 2007e), in combination with a well differentiated and congruent identity, can be associated with more effective, committed behaviour at the lower levels of abstraction (Human-Vogel, 2013; Lord et al., 2010). The theoretical assumption framing academic commitment in the present study emphasises identity-relevant self-regulation (Burke & Reitzes, 1991; Demerath, 2006; Foote, 1951; Human-Vogel, 2008; Human-Vogel, 2013; Lieberman, 1998). In sum, academic commitment is conceptualised as self-initiated, self-directed and self-controlled learner behaviour (Baumeister & Vohs, 2003; Kirwan, Lounsbury & Gibson, 2010; Lord et al., 2010) with identity investment as an essential requirement for the occurrence of commitment to learning (Human-Vogel, 2013). According to Demerath (2006) commitment fundamentally depends on the meaningfulness of a particular identity and therefore the Meaning Maintenance Model (MMM) of Heine et al. (2006) was selected as the conceptual framework to guide and inform the study (see Chapter 2, Section 2.2). Because the original Rusbult et al. (1998) model of commitment does not specifically provide for identity self-regulation, meaningfulness was added as an extra

subscale to the adapted Academic Commitment Scale (ACS), specifically to address the identity aspect of commitment. The study with regard to the interrelationships between commitment, self-differentiation and pride in an academic context was guided by the following primary research question and three subquestions:

Primary question

What is the relationship between self-differentiation, pride and commitment in university students?

Subquestions:

1. *How are self-differentiation, pride and commitment related in university students?*
2. *Are demographic factors such as gender, age, home language, year of study and place of residence related to students' level of commitment?*
3. *Are self-regulatory factors such as learner autonomy (study management, satisfaction with study course), resource allocation (study-time, social networking, job-involvement, family support) and goal setting (learning and life goals) related to students' level of commitment?*

A quantitative approach, following a cross-sectional correlational survey, based on a one-stage cluster sampling procedure, was conducted after ethical clearance had been received (see Chapter 1, Section 1.9). Data analysis included an examination of the scale properties of the instruments using reliability and item-analyses to assess the reliability and internal consistency of the scales. Exploratory factor analysis (EFA) was used to extract and determine the appropriate number of factors for each of the three scales (see Chapter 4, Section 4.2). The research phases, the development of the new Academic Commitment Scale (ACS) and the pilot study results were reported in Chapter 3. The results of the main study were presented in Chapter 4 and a summary of the main results is presented in the next section.

5.2 SUMMARY OF THE RESULTS

5.2.1 RELIABILITY AND ITEM ANALYSIS

5.2.1.1 Academic Commitment Scale

The full scale alpha reliability coefficient of the adapted Academic Commitment Scale (ACS) in the main study was 0.89 and for the subscales $\alpha = 0.83$ (Commitment Level), $\alpha = 0.90$ (Meaningfulness), $\alpha = 0.90$ (Satisfaction), $\alpha = 0.80$ (Quality of Alternatives) and $\alpha = 0.89$ (Investment Size) respectively. Thus, the five subscales of the ACS provide evidence for acceptable reliability and good internal consistency. Item Statistics (Annexure D, Table 4.2) and Item-Total Statistics (Annexure D, Table 4.3) indicate very good overall reliability ($\alpha = .89$). Item alphas vary from .89 to .91. All the items scored well above $r = .30$ (majority of items $> .50$), except for the subscale Quality of Alternatives (Corrected Item-Total Correlations: CA1: -.27, CA2: -.33, CA3: -.28 and CA4: -.28). As expected, the Quality of Alternatives items correlated negatively with the other items, which I took as initial evidence supporting the construct validity of the scale.

5.2.1.2 Differentiation of Self Inventory

The full scale alpha reliability coefficient of the *Differentiation of Self Inventory* (DSI-R) in the main study was $\alpha = 0.90$. The final reliability coefficients of the four subscales were as follows: Emotional Reactivity $\alpha = 0.86$, Emotional Cutoff $\alpha = 0.84$, I-position $\alpha = 0.72$ and Fusion with Others $\alpha = 0.71$ (see Table 4.14, Chapter 4, Section 4.4.2). The items of the Fusion with Others subscale were distributed among all the other scales in the factor analyses (EFA), which was problematic. Seeing that previous versions of the scale are known to be problematic (Skowron & Schmitt, 2003), I omitted the scale from further analysis because a clear factor structure could not be achieved. The three remaining subscales (ER, EC, IP) conformed well to the theorised model (Chi-square = 815.728, $df = 462$, $p = .000$, RMSEA = .058).

5.2.1.3 Authentic and Hubristic Pride Scales

The full scale alpha reliability coefficient of the Authentic and Hubristic Pride Scales (AHP) in the main study was $\alpha = 0.83$. The Authentic Pride Scale had a reliability coefficient of $\alpha = 0.86$ and the Hubristic Pride Scale a reliability coefficient of $\alpha = 0.84$.

5.2.2 SCALE CORRELATIONS: SPEARMAN r_{ho}

5.2.2.1 Intra-subscale correlations

❖ Academic Commitment scale

The pattern of correlations for the subscales of the adapted Academic Commitment Scale (ACS) conformed to the theoretised assumptions and thus the structure of the adapted scale of commitment to an academic context appeared to remain intact. The new Meaningfulness subscale strongly correlated with Satisfaction ($r_s = .69, p < .001$) and Investment ($r_s = .54, p = .001$), but to a lesser extent with Commitment Level ($r_s = .33, p < .001$) in the expected direction. Satisfaction correlated strongly with Investment ($r_s = .56, p < .001$) and Commitment Level ($r_s = .42, p < .001$). Investment was significantly correlated with Commitment Level ($r_s = .39, p < .001$). As expected Alternatives correlated significantly, negatively with Satisfaction ($r_s = -.43, p < .001$), Investment ($r_s = -.31, p < .001$) and Commitment Level ($r_s = -.16, p < .05$).

❖ Differentiation of Self Inventory

In terms of Differentiation of Self Inventory correlations among the subscales were positive, significant and in the expected directions. Intercorrelations ranged from 0.30 to 0.42. Emotional Reactivity correlated significantly with Emotional cutoff ($r_s = .50, p < .001$) and I-position ($r_s = .42, p < .001$). Emotional Cutoff correlated significantly, but weakly with I-position ($r_s = .22, p < .01$).

❖ Authentic and Hubristic Pride Scales

No significant correlations between the Authentic Pride and Hubristic Pride Scales were found.

5.2.2.2 Inter-subscale correlations

On the Academic Commitment Scale, Meaningfulness significantly correlated with I-Position ($r_s = .20, p < .01$) and Authentic Pride ($r_s = .51, p < .001$). Satisfaction correlated significantly with Emotional Reactivity ($r_s = .22, p < .01$) and Emotional Cutoff ($r_s = .20, p < .01$), but the correlation was relatively weak. The correlations between Emotional Reactivity and Hubristic Pride ($r_s = -.20, p < .01$), as well as between Emotional Cutoff and Hubristic Pride ($r_s = -.33, p < .001$) were significantly negative, but weak. Satisfaction correlated significantly with Emotional Reactivity ($r_s =$

.22, $p < .01$), Emotional Cutoff ($r_s = .20$, $p < .01$) and I-position ($r_s = .31$, $p < .001$), but the correlations were weak. Satisfaction was strongly correlated with Authentic Pride ($r_s = .54$, $p < .001$). Quality of Alternatives correlated significantly, but weakly in a negative direction with Emotional Reactivity ($r_s = -.17$, $p < .05$) and Emotional Cutoff ($r_s = -.12$, $p < .05$). More moderate correlations were found between Authentic Pride and the other subscales with the exception of Quality of Alternatives ($r_s = -.35$, $p < .001$), Emotional Reactivity ($r_s = .36$, $p < .001$) and Emotional cutoff ($r_s = .26$, $p < .001$). Investment correlated significantly in a positive direction with I-position ($r_s = .20$, $p < .01$), Emotional Cutoff ($r_s = .18$, $p < .05$) and with Authentic Pride ($r_s = .41$, $p < .001$). Correlations between Commitment Level and Emotional Cutoff ($r_s = .16$, $p < .05$), I-Position ($r_s = .24$, $p < .01$) and Authentic Pride ($r_s = .30$, $p < .001$) were significant, but weak. No significant correlations were observed between Hubristic Pride and the Commitment subscale constructs.

5.2.3 GROUP DIFFERENCES

Because scale scores were generally not normally distributed I used nonparametric statistics (Mann-Whitney U-Test and Kruskal Wallis test statistics) to examine the distribution and significance of scale scores (See Chapter 1, Section 1.11.3). Age and study-time variables were recoded with the view to form three equally distributed categories. The results with regard to the influence of demographic factors (gender, age, language, academic year of study, place of residence) and self-regulatory learner behaviours (preparedness for university studies, study management, learning goals, satisfaction with study course, life goals, social networking, part-time job, family support) are summarized as follows:

5.2.3.1 Demographic factors

❖ Gender

In terms of gender, higher mean scores were observed for females on Satisfaction and Investment, with male participants achieving higher means on Emotional Reactivity, I-Position and Hubristic Pride.

❖ Age

No significant differences in means were observed between the different age groups.

❖ **Language**

With regard to language differences Afrikaans-speaking participants achieved significantly higher means on Emotional Cutoff and Hubristic Pride than English-speaking participants.

❖ **Academic year of study**

Because academic year of study is related to the age of participants and in view of the fact that no significant differences between the different age subgroups were reported, no additional analysis was conducted for academic year of study.

❖ **Place of residence**

In respect of place of residence, it was found that whether participants lived at home, in a residence or commune, and whether they were financially dependent with regard to their studies did not lead to significant differences on any of the scale means.

5.2.3.2 Self-regulatory learner behaviours

The findings of the present study with respect to self-regulatory behaviours such as the propensity to set goals, feeling prepared and managing one's studies effectively, as well as satisfaction with one's chosen study course are summarized as follows:

❖ **Preparedness for university studies**

Participants who felt that they are prepared for university studies attained higher means on Meaningfulness, Satisfaction, Commitment Level and Authentic Pride. Participants who felt unprepared reported higher mean scores on Emotional Cutoff.

❖ **Study management**

Effective study management was associated with higher mean scores on Meaningfulness, Satisfaction, Investment, Commitment Level, I-Position and Authentic Pride. On the contrary, higher mean scores on Quality of Alternatives, Emotional Reactivity and Emotional Cutoff were generally associated with ineffective study management. Participants who felt they spent adequate time on studying tended to report higher means on Investment and Commitment level.

❖ **Learning goals**

The presence of learning goals was associated with higher mean scores on Meaningfulness, Satisfaction, Investment and Commitment level, whereas participants without learning goals reported higher mean scores on Quality of Alternatives.

❖ **Satisfaction with study course**

If participants were satisfied with their study course they reported higher mean scores on Meaningfulness, Satisfaction, Investment, Commitment Level and Authentic Pride. Dissatisfaction was associated with higher Hubristic Pride scores.

❖ **Life goals**

Participants with life goals reported higher mean scores on Meaningfulness and Commitment Level and those without life goals reported higher means on Quality of Alternatives.

❖ **Social networking**

No significant differences were found whether students spent time on social networking such as facebook or not.

❖ **Study-time**

Study-time variables were categorised in three groups and the Kruskal Wallis Test was used to compare the groups. Significant differences were found for Investment Size ($\chi^2 = 41.45$, $df = 2$, $p = .000$) and Commitment Level ($\chi^2 = 7.71$, $df = 2$, $p = .021$). The group that spent 120 minutes or more on studying scored higher mean scores on Investment Size and Commitment Level.

❖ **Part-time job**

Whether participants had part-time jobs and the amount of work time allocating to such jobs as reported by students, no significant differences were indicated on any of the study variables.

❖ **Family support**

Participants who felt that they were not supported by their families reported higher scores on Emotional Cutoff and Hubristic Pride.

5.3 DISCUSSION OF FINDINGS

5.3.1 SUBQUESTION 1: CORRELATIONS BETWEEN SELF-DIFFERENTIATION, PRIDE AND COMMITMENT

The following discussion will be focused on subquestion 1: *How are self-differentiation, pride and commitment related in university students*, in respect of the present study:

5.3.1.1 Self-differentiation in relation to academic commitment

❖ The Self as a self-regulatory agent

In the present study I argue that the self as a self-regulatory entity, as represented by the I-position as an identity-related aspect of the self-differentiation construct, is essentially and centrally involved in all self-regulatory processes and as such relevant to identity-level commitment. I have reasoned that a positive association between self-differentiation and commitment will provide evidence for the argument that commitment in an academic context requires identity-involvement. This basic theoretical assumption is supported by, among others, the following available literature on commitment: Foote (1951) laid the foundation for the theory that commitment in reality is commitment to a particular identity or a series of identities. Burke and Reitzes (1991) also argued that complete commitment to an identity is an essential requirement for the sustainment of an active self as well as for explaining an individual's persistence on a particular course of action (commitment). Scholars such as Baumeister and Vohs (2003), Human-Vogel (2013) and Lord et al. (2010) recognise the self as an important agent actively involved in identity-level self-regulation processes. An important objective of the present study was therefore to determine to what extent self-differentiation in terms of aspects such as emotional reactivity, I-position, emotional cutoff and fusion with others (Skowron & Friedlander, 1998) could possibly be related to academic commitment. I was in particular interested in the question as to how and to what extent students' ability to take an I-position in terms of a solid sense of self, could be associated with their level of commitment in an academic context.

❖ The relationship between I-position and academic commitment

The findings of the present study indicate that the ability to take a stable I-position is significantly, positively associated with all the various commitment variables on the Academic Commitment Scale (ACS), namely meaningfulness, satisfaction, investment and commitment level as identity-related constructs, except quality of alternatives (Table

4.27). I thus take this pattern of findings as sufficient evidence for the theoretical position that academic commitment requires identity-involvement. Results indicate that a well differentiated self or identity in the absence of emotional reactivity and emotional cutoff are related to the development and attainment of psychological health and well-being (Lord et al., 2010; Skowron & Friedlander, 1998; Skowron et al., 2003, p.124). If one conceptualises commitment as identity-relevant self-regulation, then one would expect that constructs related to the self would generally have a positive association with commitment. The results of the present study (Table 4.27) confirm the notion that a solid self in terms of the ability to take a strong and stable I-position may be associated with higher self-differentiation (Skowron & Friedlander, 1998). The results (Table 4.27) also suggest that a solid and stable I-position (Skowron & Friedlander, 1998) is significantly, positively associated with students' level of commitment.

❖ **The meaningfulness of identity-level self-regulatory commitment in terms of a teleological perspective**

Furthermore, the results indicate significant associations between meaningfulness, level of commitment (among others, level of persistence, Rusbult et al., 1998, p. 360) and self-differentiation, particularly in terms of a strong I-position in the absence of emotional reactivity and emotional cutoff. The findings can be interpreted to mean that when students experience their identity as meaningful in terms of a strong, solid sense of self, their level of commitment will be accordingly positively affected. This is consistent with the theory of Demerath (2006) who has argued that the motivation to engage in identity-work (commitment) is dependent on the meaningfulness of that particular identity and not fundamentally aimed at achieving a particular valued goal. The significant association found between a well differentiated self or identity and the level of student commitment, is also consistent with Human-Vogel's (2013) description of commitment as identity-level self-regulation. In this context she argues that commitment is essentially based on objective knowledge of the self in terms of a healthy differentiated and congruent identity responsible for the coherence and consistency needed for self-regulatory behaviours at the lower levels of abstraction in self-regulation. The close relationship being found between a well differentiated self and academic commitment level in the present study may also be indicative of the involvement of a self that is based on a future perspective on identity-related commitment. In this respect Human-Vogel (2013) and Lord et al. (2010) argue that self-regulation is future-oriented and that commitment requires a teleological

perspective in terms of a well differentiated self that stretches beyond the present, functioning on the high-identity-level of self-regulation. Sohl and Moyer (2009) also argue that proactive coping as a positively-focused striving for goals is predictive of well-being and important for future-oriented self-regulatory behaviour (commitment).

❖ **The relationship between commitment and its self-differentiation and pride correlates**

Significant negative correlations between self-differentiation and quality of alternatives, emotional reactivity and emotional cutoff were indicated in the results of the present study (Table 4.27). The negative correlations between self-differentiation and quality of alternatives (*ER:rs* = $-.17$, $p < .05$; *EC:rs* = $-.12$, $p < .05$) were significant, but very weak. The performance of the DSI-R scale in the present study was disappointing, particularly in respect of the I-position subscale. It is suspected that students might have answered the questions in the opposite direction, since most of the questions were supposed to be answered in the reverse order and therefore the results could probably be confounded. I therefore believe that the results in respect of the associations between self-differentiation variables and other subscale variables of the present study should be interpreted with caution. This could also be the case with regard to the weak level of associations found between for example, I-position and meaningfulness ($rs = .20$, $p < .01$), as well as between I-position and satisfaction ($rs = .31$, $p < .001$). However, the correlations between authentic pride and the commitment subscales yield promising results. Authentic pride correlated moderately with meaningfulness ($rs = .51$, $p < .001$) and satisfaction ($rs = .54$, $p < .001$). Moderate correlations were also found between authentic pride and investment ($rs = .41$, $p < .001$), whereas the correlation between authentic pride and commitment level was lower ($rs = .30$, $p < .001$). Meaningfulness and satisfaction as identity-related constructs revealed strong and significant positive correlations with each other ($rs = .69$, $p < .001$), and they also positively correlated with authentic pride ($rs = .51$, $p < .001$ and $rs = .54$, $p < .001$ respectively). Furthermore, authentic pride, meaningfulness and satisfaction were significantly positively related to commitment level (*AP:rs* = $.30$, $p < .001$, *CM:rs* = $.33$, $p < .001$, *CS:rs* = $.42$, $p < .001$). Authentic pride, meaningfulness and satisfaction are constructs that are strongly related to the self or identity. Based on these findings it may be concluded that authentic pride, meaningfulness and satisfaction as identity-related constructs shared a significant association with high identity-level self-regulation (commitment) and therefore most

probably be strongly related to a solid and stable I-position. It must also be noted that quality of alternatives is significantly, negatively correlated with authentic pride, meaningfulness, investment and commitment level ($AP:rs = -.35, p < .001$; $CM:rs = -.46, p < .001$; $CI:rs = -.31, p < .001$; $CL:rs = -.16, p < .05$). In addition, the fact that a significant correlation was recorded between I-position and authentic pride ($rs = .49, p < .001$) seems to be of importance, indicating that a stable I-position is highly and positively related to identity-level self-regulation. I thus take the significant positive correlations between authentic pride and the commitment subscales, with the exception of alternatives, as initial evidence that a stable, strong I-position is positively related to academic commitment. It can thus also be assumed that alternatives will also be negatively associated with the I-position.

In view of the aforementioned assumptions it can be accepted that the results of the study under discussion support findings of available literature arguing that low levels of self-differentiation can be associated with maladaptive behaviours, whereas high differentiated behaviours may be associated with psychological well adjustment and well-being. For example, Skowron and Friedlander (1998) argue that emotional reactivity and emotional cutoff are unique characteristics of a maladjusted sense of self (false/pseudo self as opposed to a healthy, solid self). Skowron and Friedlander (1998) are of the opinion that low differentiated individuals will most probably experience difficulties in handling stress and anxiety and therefore may be more susceptible to alternative options. Skowron and Dendy, (2004) argue that a firm and solid sense of identity possesses the capacity to mediate psychological symptoms and academic stress in female and male students. The results of the present study are consistent with scholars such as Skowron et al. (2004) and Patrick et al. (2007) who posited that a firm I-position enables students to regulate and control emotional reactive responses. However, they are still able to stay socially connected to significant others, while maintaining their sense of autonomy in emotional and intellectual involvement with others. My findings also correspond with those of Skowron and Dendy (2004) arguing that low levels of emotional reactivity and emotional cutoff (high differentiation) generally enable students to exercise intellectual, effortful control over their emotions, particularly in respect of anxiety and behaviour without becoming disengaged from their study responsibilities. Furthermore, findings are also consistent with Murdock and Gore (2004) who have found that perceived stress in interaction with low levels of self-differentiation is regarded as significant predictors of psychological distress and dysfunction in university students. The pattern of findings may

also suggest that high differentiation can be associated with reflective coping, whereas reactive and suppressive coping strategies may be associated with lower levels of differentiation in university students (Murdock & Gore, 2004). In sum, the present study seems to demonstrate that students who are highly differentiated tend to persist with their studies and therefore less prone to seek alternatives and to become disengaged. The findings may as such be regarded as an extension on the current literature on commitment.

❖ **Cultural variations and self-differentiation in academic commitment**

It has to be noted that as a result of the composition of the sample in the present study (only 17% from African and other cultures) cultural variations in self-differentiation could not be measured effectively, which is of course a major limitation of the study. The majority of participants in the study were Afrikaans and English speaking students. Afrikaans-speaking participants in the present study reported higher mean scores on emotional cutoff than their English-speaking participants. This result probably indicates that Afrikaans speaking participants may be associated with lower levels of differentiation and more dependent on others for approval than their English speaking counterparts (Skowron & Friedlander, 1998, p. 236). People with low levels of differentiation tend to conform to the views and convictions of others (Skowron & Friedlander, 1998, p. 236). With regard to cultural variations Gushue and Constantine (2003) examined self-differentiation in terms of individualism and collectivism in African American university students. Their results provide evidence that students who were more differentiated put a high price on individuality as an expression of a solid, autonomous self, displaying the capacity to uphold personal beliefs, while still maintaining their contact with significant others. Furthermore, students who reported a strong belongingness to their cultural group and who willingly put their cultural group's interests ahead of their own, reported accordingly less emotional reactivity and avoidance behaviours (Gushue & Constantine, 2003). The implication is that, although the nature of self-differentiation in cultural context could differ in terms of individualism and collectivism, an autonomous, solid identity is essentially required for a high differentiated self.

❖ **The utilisation of the Rusbult et al. (1998) Investment Model in a nonrelational academic domain**

A main objective of the present study was to examine the appropriateness of utilizing the Rusbult et al. (1998) investment model scale of commitment in an academic domain as a

non-relational domain. The basic principles underpinning the investment model scale is based on the assumption that commitment in terms of persistence within a particular relationship will be strengthened when satisfaction is experienced in the relationship, when large investments are made and when better alternatives are not available (Le & Agnew, 2003; Rusbult et al., 1998). In the present study the Academic Commitment Scale (ACS), adapted from the original investment model scale (Rusbult et al., 1998) proved itself as a reliable and useful scale for the measurement of academic commitment in higher education settings. The scale seems to be particularly useful for the assessment of aspects related to academic commitment on the lower task/achievement and engagement levels of self-regulation in terms of satisfaction, investment and alternatives. However, the original Rusbult et al. (1998) investment model scale does not provide for the assessment of identity-related aspects on the higher identity-level of self-regulation (Human-Vogel, 2013; Lord et al. 2010). Considering that academic commitment in the present study was investigated particularly from an identity-related teleological perspective, it was decided to develop meaningfulness as an additional subscale. Meaningfulness was thus included in the Academic Commitment Scale (ACS), specifically with the aim to address identity-level self-regulatory aspects of academic commitments in terms of their relatedness to meaning in a higher education environment (Demerath, 2006; Human-Vogel, 2013).

❖ **The significance of meaningfulness in relation to academic commitment level**

Cronbach's alpha coefficients obtained for the 10 items in the meaningfulness subscale of the ACS were very good and ranged from .86 to .87. This is an indication that the meaningfulness subscale performed and succeeded exceptionally well in capturing how participants in the study view and experience their studies in respect of, among others, the meaningfulness of their studies and self-expression in an academic context (see Table 3.4). Available literature on identity-related commitment including academic commitment, indicate that meaning exercises an important function in identity-related self-regulation (Human-Vogel, 2013; Lieberman, 1998; Lord et al., 2010). The findings of the present study in this regard may in particular be interpreted to mean that the identity-related meaningfulness subscale can successfully measure students' attitudes and experiences of meaningfulness in respect of their studies in a higher education setting. As such the meaningfulness subscale seems to be potentially able to contribute significantly to the utility of the ACS as a measure to assess students' commitment to their studies in

terms of how they experience their identities in relation to their studies. This is consistent with Demerath (2006) arguing that motivation to engage in identity-oriented commitment depends on the meaningfulness of that particular identity and as such exerts the capacity to regulate and control identity-related aspects of commitment. It is thus not simply a matter of engagement and achievement at the intermediate, task/achievement and engagement level of self-regulation (Human-Vogel, 2013; Lord et al., 2010). The findings of the study further indicate that when students act in accordance with their identities (Demerath, 2006) they will consequently come to a more positive self-view (identity), experiencing their studies as more meaningful. Commitment in respect of appropriate identity behaviour such as active engagement in and persistence with studies actually articulates the meaningfulness of student identity (Demerath, 2006). Demerath (2006, p. 492) argues that the more meaningfulness an identity provides, the more people become committed to their particular identities. Furthermore, when a breakdown in such an identity occurs as a result of cognitive and emotional disruption, it becomes manifested in a loss of security and certainty (Demerath, 2006, p. 492). Demerath (2006, p. 492) also argues that identity maintenance and commitment have a considerable impact on the creation and maintenance of meaningfulness in learning. Because the relation between meaningfulness and identity is inherently a given human trait, it follows that students come to a higher education institution with a particular developed identity. A study conducted by Berzonsky and Kuk (2005, p. 242) revealed that students possessing an informational identity style are well prepared to deal with academic challenges and also display a clear sense of direction and educational purpose. Human-Vogel (2008, p. 120) argues that highly committed students' life and learning goals emerged from a process of identity development and growth. Human-Vogel (2008, p. 120) found that these students' authentic commitments are based on how they view and experience their identities. The results of the present study provide sufficient evidence that the ACS, particular with reference to the meaningfulness subscale, possesses the capacity to measure self-views and experiences of students in relation to their studies in higher education environments.

Although meaningfulness and satisfaction in their relation to studies, showed strong correlations among themselves in the study, they clearly emerged as two distinct constructs, each one loading on its own particular factor (Table 4.12). Because the meaningfulness of identity determines the frequency, stability and impact in commitments (Demerath, 2006) Human-Vogel and Dippenaar (2012) express the opinion that meaningfulness may be less volatile than satisfaction when situational changes occur.

Therefore, meaningfulness in terms of a solid identity provides the stability and motive power in sustaining commitment to studies at the high identity-level of self-regulation and as such to a lesser extent subjected to situational changes (Human-Vogel & Dippenaar, 2012). The experience of satisfaction at the intermediate, task and achievement regulatory level may vary from time to time. Based on the findings of the present study I believe that the strong relatedness found between meaningfulness and satisfaction may be an indication that satisfaction is regulated and controlled by a high-differentiated self experienced as meaningful. Results confirm support for the hypothesis of Human-Vogel and Dippenaar (2012), positing that commitments should be more stable when they are experienced as personally meaningful and not only as satisfactory.

❖ **Meaningfulness as a self-regulatory mechanism in relation to identity-level academic commitment**

The implication of the findings is that academic identity-commitment in terms of the meaningfulness of a particular identity will consequently be optimised at the high identity-level of regulation (Human-Vogel, 2013; Lord et al., 2010). Meaningfulness as such may exercise the capacity to regulate satisfaction, investment and alternatives at the intermediate, task- and engagement level of self-regulation in academic commitment. The significant relatedness that was found between self-differentiation in terms of I-position and meaningfulness underscores the fact that self-relevant commitments are more likely to be associated with higher self-differentiation (as indicated by a solid I-position) and should therefore be experienced as meaningful. I reasoned throughout the present study that meaning as a basic human need (Heine et al., 2006, p. 88) can also be associated with psychological well-being and I found that the results of the present study seem to support this line of reasoning, because students who reported to be satisfied with their studies scored in general significantly higher on satisfaction, meaningfulness and commitment level. Adequate levels of meaning in daily life provide stability in meaning, promoting satisfaction, positive affect (Human-Vogel, 2006; Krypel & Henderson-King, 2010; Lord et al., 2010; Petersen, Louw & Dumont, 2009) and social connectedness (Lord et al., 2010, p.546; Steger & Kashdan, 2007, p. 161; Steger & Kashdan, 2013, p. 10). These are all aspects considered to be relevant to effective self-regulatory identity-level behaviours. The pattern of significant positive correlations between meaningfulness and other identity-level commitment constructs of the ACS such as satisfaction, I-position, investment, commitment level and authentic pride (see Section 5.3.1.1 above), provide some initial evidence for the usefulness of the scale. The meaningfulness subscale

proved in the present study that it can successfully measure the extent to which students experience their studies as meaningful and how they express their identity in relation to their studies (Steger & Kasdan, 2007; Steger & Kasdan, 2013).

❖ **Summary**

In sum, the results of the present study indicate that academic commitment can be described as high-level regulation of the self (Lord et al., 2010) or identity-level self-regulation (Human-Vogel, 2013). The self as a future-oriented entity (Human-Vogel, 2013; Lord et al., 2010) is expressed by the self-differentiation construct. The future self, specifically the more abstract distant future self (Lord et al, 2010) in terms of a solid self or firm I-position that is experienced as meaningful, provides the necessary coherence and consistency that are required for the frequency, stability and impact (Demerath, 2006: Human-Vogel, 2013) in substantial commitments over time (Lieberman, 1998). Academic commitment as an identity-self-regulatory process essentially requires identity investment (Human-Vogel, 2013) for the occurrence, development and sustainment of authentic commitments.

5.3.1.2 Pride in relation to self-differentiation and academic commitment

❖ **The relationship between authentic pride, self-differentiation (I-position) and level of academic commitment**

The Authentic and Hubristic Pride Scales (Tracy & Robins, 2007d) were used to measure pride (authentic and hubristic) as a self-relevant emotion in respect of academic commitment. It was, among others, hypothesised that the reported learning experiences of undergraduate students in terms of meaningfulness, satisfaction and investment would be positively related to academic commitment level, as well as to authentic pride (see Section 1.8.3). In the aforementioned paragraphs I pointed out that the results of the present study provided significant evidence that the additional meaningfulness subscale in relation with satisfaction, investment and high self-differentiation (solid I-position) can be successfully utilised to assess students' experiences of meaningful commitments in academic context. As expected the findings indicate that authentic pride significantly correlates in particular with meaningfulness, satisfaction, investment, I-position and commitment level (see Table 4.27 and Section 5.3.1.1). Interestingly, a significant association emerged between authentic pride and meaningfulness subscales (Table 4.27). Authentic pride is a positive emotion fundamentally relevant to identity (Tangney et

al., 2007b), therefore functionally involved in the process of self-differentiation. Findings indicate that the role of authentic pride in student experience is strongly, positively linked to a solid I-position (Table 4.27). The suggestion is that authentic pride, as a strong “motivational force” (Tangney, 2005), may potentially possess the ability to reinforce the meaningfulness of an identity in terms of a high-differentiated identity (I-position) and as such may strengthen the level of student commitment. Likewise, results produced strong correlations between the authentic pride, satisfaction and investment subscales, also suggesting that authentic pride in terms of an identity that is experienced as meaningful, may be significantly related to students’ experiences of satisfaction with their studies (see Section 5.3.3 below). The findings of the present study coincide with the findings of a study conducted by Tracy and Robins (2007d), linking authentic pride as a “prosocial, achievement-oriented emotion” (Tracy & Robins, 2007d, p. 520) to a genuine high self-esteem (as an element of I-position), based on personality traits like extraversion, agreeableness, openness and conscientiousness. Findings are consistent with Tracy et al. (2009) who support a predicted relationship between authentic pride and genuine self-esteem.

Furthermore, authentic pride correlated significantly with commitment level in the present study in terms of persistence and long term involvement (Rusbult et al., 1998) in studies. As expected no significant correlation emerged between authentic pride and alternatives (Table 4.27), indicating that persistence represents a vital element of both commitment level and authentic pride. Results also suggest that authentic pride, as is the case with commitment, seems to have the capacity of motivating students to pursue success, whereby perseverance is strengthened despite unfavourable circumstances (Williams & DeSteno, 2008, 2009). Commitment is regarded as the most powerful predictor of perseverance (Rusbult et al., 1998) in achievement as well as in relational domains (Williams & DeSteno, 2008, 2009). Furthermore, results indicate a significant association between the moral nature of authentic pride experiences (Tangney et al., 2007b), a well differentiated self and commitment level. Pride is also seen as a moral emotion with the capacity to influence moral choices and behaviours (Tangney, 2005), where moral values are viewed as functionally central to commitment (Lieberman, 1998). From the findings of the present study it can probably be assumed that authentic pride may be significantly related to students’ motivation to choose commitment as a moral course of action. This is consistent with Tangney et al. (2007b), suggesting that “feelings of pride meeting or exceeding morally relevant standards...may serve important motivational functions,

rewarding and reinforcing one's commitment to the ethics of autonomy, community and divinity" (Tangney et al., 2007b, p.360).

❖ **The relationship between Hubristic Pride and the correlates of academic commitment**

In the present study no significant correlations were found between hubristic pride and the different correlates of commitment namely, meaningfulness, satisfaction, investment and commitment level (Table 4.27). However, it could be expected since commitment seems to strongly rely on the input of a highly differentiated identity in terms of a solid I-position, supported by authentic pride experiences as indicated in the results of the present study. Hubristic pride is considered a maladaptive emotion, which can be associated with emotional instability, narcissistic self-aggrandisement and dominance, resulting in maladaptive, self-destructive behaviours such as aggression, hostility and conflict within interpersonal relationships (Hart & Matsuba, 2007; Tracy & Robins, 2007d). Furthermore, hubristic pride is positively related to neuroticism, disagreeableness and non-conscientiousness (Cheng et al., 2010; Hart & Matsuba, 2007; Tracy & Robins, 2007d), all negative orientations that are counterproductive to commitment. The results of the present study show a slight, negative correlation between hubristic pride and emotional reactivity ($ER: rs = -.20, p < .01$) as well as between hubristic pride and emotional cutoff ($EC: rs = -.33, p < .001$). (See Table 4.27).

❖ **The relationship between Authentic Pride and Hubristic Pride in academic commitment**

No significant correlations were found between authentic and hubristic pride (Table 4.27). Although the authentic and hubristic items loaded separately and independently on two factors as indicated in literature (Tracy & Robins, 2007d), the two-factor model did not fit the data well. Pride was examined in the present study in relation to self-differentiation and commitment in an academic context and as indicated in the aforementioned section no significant correlations between hubristic pride and the correlates of commitment emerged (see Table 4.27). Authentic pride on the other hand, significantly positively correlated with meaningfulness, satisfaction, investment and commitment level (see Table 4.27). In this regard Tracy and Robins (2007d) found that inter-correlations between authentic and hubristic pride were fairly low, with some divergent negative correlations with self-esteem and the Big Five personality traits. They also found hubristic pride to be significantly positively related to the shame emotion (Tracy & Robins, 2007d). Their

findings also indicate that hubristic pride, like shame and guilt, displays maladaptive correlates, as opposed to authentic pride's adaptive qualities (Tracy & Robins, 2007d). Tracy and Robins (2007d) also regard it as unusual for a single emotion to embody dimensions of entirely opposite correlates, evoked by quite distinct attributions. In sum, the findings of the present study show no significant inter-correlations between academic commitment and hubristic pride as well as between authentic pride and hubristic pride. They acknowledge the possibility that authentic pride and hubris may be two distinct emotions and not facets of the same emotion. The question is thus once again raised whether the two dimensions of pride are facets of the same emotion or two distinct emotions (Tracy & Robins, 2007d). The results of my study indicate that no significant correlation exists between authentic pride and hubristic pride. The items of the two subscales loaded clearly on two separate factors (see Table 4.24). Furthermore, whereas authentic pride related strongly to all the commitment variables, no significant correlations were found between hubristic pride and the various commitment variables (Table 4.27). In addition, since the two correlates of the pride emotion reveal entirely opposite personality traits, as suggested by Tracy and Robins (2007d), I believe that it is possible that the two dimensions of pride may be two separate emotions. I am in agreement with Tracy and Robins (2007d) that further research is needed to address this particular question.

❖ **The relationship between Pride and cultural influences in academic commitment**

The composition of the sample of the present study does not allow for a thorough investigation into cultural influences on the pride expression. Only 17% accounts for African and cultural participants other than Afrikaans and English. However, correlations of the present study suggest that the responses of the Afrikaans speaking participants are more related to hubristic pride characteristics than their English speaking counterparts. Hubristic trends may be ascribed to an "exaggerated façade of interdependence" (Nichols & Schwartz, 1998, as cited in Skowron & Friedlander, 1998, p. 236) and as such linked to emotional cutoff and subsequently to a pseudo/false self. The hubristic person often boasts of his/her emancipation from parents (Skowron & Friedlander, 1998, p. 236), which could be an indication of maladjustment within family relations. In addition, it is important to take note of the findings of previous studies which suggested that although pride shows a definite recognisable nonverbal expression, cultural differences with regard to pride experiences do exist in terms of situational elicitors, display rules and societal values (Tracy & Robins, 2007b). Culture in particular influences the way in which the self is

construed, leading to cultural differences in emotional experiences (Tracy & Robins, 2007e). In individualistic cultures the self is more independently construed, affecting pride as an “ego-focused” (Tracy & Robins, 2007e, p. 200) emotion, whereas in collectivistic cultures pride and “other-focused” (Tracy & Robins, 2007e, p. 200) emotions such as shame are experienced against the background of an interdependent view of the self (Tracy & Robins, 2007e).

❖ **Summary**

In sum, the findings of the present study provide conclusive evidence that student commitment can be described as identity-level self-regulation which is dependent on the involvement of a well differentiated self, regulating behaviours at the lower levels of abstraction in self-regulation (Human-Vogel, 2013; Lord et al., 2010). Objective self-knowledge in terms of a well differentiated, future-oriented identity is required for stability in student self-regulatory commitment (Human-Vogel, 2013). Student commitment at the identity-level of self-regulation (Human-Vogel, 2013) seems to be a core function of self-differentiation. A solid, future-oriented identity provides the necessary coherence and consistency to substantive commitment (Lieberman, 1998), enabling students to persist on a chosen course of action. The results of the present study also indicate that a well-differentiated and congruent identity is needed for effective and adaptive emotion regulation at the task and achievement level of self-regulation (Human-Vogel, 2013; Skowron & Friedlander, 1998). Authentic pride correlates positively with all the correlates of commitment and as such seems to be related to self-differentiation in terms of the enhancement of a solid sense of self (Skowron & Schmitt, 2003; Tracy & Robins, 2007b). On the other hand, self-differentiation may possibly be associated with fostering the experiences of authentic pride, that may lead to the motivation of students (Tangney, 2005) to commit to their studies, to become engage in their studies and to persist with their commitments at the task and achievement level of self-regulation (Human-Vogel, 2013; Lord et al., 2010). Authentic pride is also a moral emotion that possesses the power to motivate students to choose commitment as a moral course of action and to persist in commitments (Tangney, 2005; Williams & DeSteno, 2008). Hubristic pride on the other hand, according to the findings of the present study, does not seem to play any significant role in student authentic academic commitment.

5.3.2 SUBQUESTION 2: DEMOGRAPHIC FACTORS

Are demographic factors such as gender, age, home language, academic year of study and place of residence related to students' level of commitment?

❖ **The relationship between age and academic commitment**

Age did not make a difference on scores on any of the study variables, nor did it matter whether participants lived at home, in a residence or a commune. In respect of age Skowron and Friedlander (1998, p. 242) also reported that no significant relationship was observed in terms of the correlations between age and I-position, indicating that capability of younger adults to define a self and to behave autonomously, was no different from their older counterparts. A review of literature at hand, give no indication whether place of residence plays a role in students' commitment to their studies.

❖ **The relationship between gender and academic commitment**

Relatively small differences were found between men and women in previous studies on relational commitment (Le & Agnew, 2003; Rusbult et al., 1998), and when significant differences are reported women tend to be more satisfied, make better investments and are more committed than their male counterparts. Men on the contrary are more prone to pursue alternatives (Le & Agnew, 2003, p. 51; Rusbult et al., 1998, p. 380). In the present study, women indicated significantly more satisfaction with their studies, reported higher levels of investments and were less inclined than male participants to report that there are better alternatives to studying. However, although the context of commitment in the present study is different from relational commitment (academic commitment), it is interesting to note that the same pattern of correlations seem to have been reported. Although cultural differences were not analysed in the present study, Le and Agnew (2003, p. 49) reported that the Investment Model Scale indicates no significant differences with regard to ethnicity.

Two studies reported that women tend to report significantly higher emotional reactivity levels than men (Skowron and Friedlander, 1998), with women sometimes experiencing more problems in respect of taking an I-position (Skowron & Schmitt, 2003). In the present study males reported significantly scores in respect of the ability to take an I-position, which support the findings of Skowron and Schmitt (2003, 215). Surprisingly, males also reported significantly higher levels of emotional reactivity. It is however suspected that men, who were overwhelming in the majority with regard to gender

representation at a different faculty, probably answered some of the questions on self-differentiation in the opposite direction. Tracy and Robins (2007d, p. 520) found no significant differences between men and women on authentic pride, but men reported higher hubristic pride. The results of the present study support Tracy and Robins' (2007d) findings that men scored significantly higher on hubristic pride, whereas women reported higher levels of authentic pride.

❖ **The relationship between home language and academic commitment**

Regarding home language, Afrikaans-speaking participants in the study reported significantly higher levels of emotional cutoff and hubristic pride than their English speaking counterparts. According to Skowron and Friedlander (1998) emotional cutoff is characterised by a tendency to be aloof and isolated from others, denying the importance of family. Individuals who are prone to emotional cutoff often boast their emancipation from parents and overly pretend to be independent, while their self-esteem is actually based on the approval of others with a tendency to conform to the views of others (Skowron & Friedlander, 1998, p. 236). The higher scores of Afrikaans speaking participants on hubristic pride may probably be ascribed to cultural differences between the two groups (Vestergaard, 2001), but this aspect could be investigated in a future study.

5.3.3 SUBQUESTION 3: SELF-REGULATORY LEARNER BEHAVIOURS

Are self-regulatory factors such as learner autonomy (preparedness for university studies, study management, satisfaction with study course), resource allocation (time allocation in terms of social networking, study-time, job-time, family support) and goal setting (learning and life goals) related to level of commitment?

❖ **Preparedness for university studies**

Students are often under-prepared for university studies as a result of inadequate schooling and poor adjustment to university life (Petersen et al., 2009), as well as a lack of maturity (Barefoot, 2004). Willcoxson, (2010, p. 627) also reflects on the readiness of students for university studies and argue that students who lack effort and preparation are prone to the likelihood to withdraw from their studies. Results of the present study (see Table 4.39) support the aforementioned findings, indicating that students who felt prepared for university studies were more likely to describe their studies as meaningful, experienced greater satisfaction with their studies and revealed more feelings of authentic

pride in their academic performances. They thus tend to be more committed to their studies than students who felt unprepared. In this respect Berzonsky and Kuk (2005) pointed out that the identity style with which students approach learning at university level (Berzonsky & Kuk, 2005, p. 242) in terms of “surface learning” versus “deep learning” (Baldwin & Koh, 2012, p. 115), plays a major role in dealing with learning challenges. Surface learning functions on the lower level of self-regulatory learning, whereas deep learning is self-regulated on a high level of identity self-regulation (Lord et al., 2010, pp. 550, 555). The results of the present study support the aforementioned findings indicating that students who were well prepared for their studies reported that they experienced their studies as meaningful and satisfactory. They also reflected a higher level of commitment than their counterparts and more inclined to experience feelings of authentic pride in their study performances.

❖ **Study management**

A literature review reveals that self-regulatory learning is described in terms of, among others, *independent learning* (Mckendry & Boyd, 2012), *self-directed learning* (Kop & Fournier, 2010, p. 2) or *academic self-directedness* (Zimmerman, 1995, p. 217). Learner autonomy is regarded as a central component of self-regulatory learning and includes learner behaviours/strategies such as the ability to take responsibility for own learning, effective planning of studies, ability to learn on their own, undertaking own research, as well as effective time-management (Mckendry & Boyd, 2012, p. 215; Richardson et al., 2012, p. 91). Autonomous learning is dependent on personal agency and is as such identity-related (Kop & Fournier, 2010; Lord et al., 2010, p.550). Self-regulatory learning or autonomous learning in respect of identity-related behaviours also includes effective management of emotions and is directly related to emotional stability and well-being (Lounsbury, Levy, Leong & Gibson, 2007, p. 62; Askham, 2008, p. 95). The results of the present study provide support for the aforementioned findings (see Table 4.41). Students who indicated a well differentiated identity in terms of a solid I-position, experiencing meaning in their studies and who were satisfied with their management of studies, tend to score higher on commitment level accompanied by higher scores on investment and authentic pride. On the contrary, significant scores on emotional reactivity and emotional cutoff may be indicative of inadequate psychological adjustment and social isolation (Skowron & Friedlander, 1998, p. 236). Scores on quality of alternatives were significant in respect of study management, probably indicating a tendency to withdraw from learning encounters, while considering other options.

❖ **Learning and life goals**

Goal commitment, other than high identity level commitment, entails attachment to a particular goal as a desire or intention (Lieberman, 1998), aimed at achieving goals in the shorter term and as such functions on the lower level of self-regulation. On the contrary, high level identity commitment requires consistency and coherency over time (Lieberman, 1998; Lord et al., 2010, pp. 554-555). Goal setting and striving in respect of aspiring for a positive future at the identity level of self-regulatory learning is uniquely associated with well-being (Lord et al., 2010, p. 546; Sohl & Moyer, 2009, p.1). Self-regulation is a matter of future-orientation and operates on different levels of abstraction (Lord et al., 2010, p. 547). Identity-related self-regulation in terms of goal-setting is in particular a high level regulatory function of the self (Lord et al., 2010, p. 550), which remains stable and consistent over time (Lieberman, 1998). Students who are more future-oriented were found to be more prone to a conscientious approach to learning, reflecting identification with educational goals, and as such predictive of meaningful academic engagement (Horstmanshof & Zimitat, 2007, p. 714). The results of the present study (Table 4.43) support the aforementioned findings in respect of setting learning and life goals. Significant scores on learning and life goals in the present study may be indicative of aspiring for a positive learning and career future and experiencing studies as meaningful and satisfactory in terms of goal setting. Furthermore, significant scores on investment may be related to the willingness to invest in goal setting on the identity level of commitment. Quality of alternatives correlated significantly with goal setting which could be an indication of seeking alternatives in the absence of setting appropriate learning and life goals.

❖ **Time allocation in terms of social networking, study-time and part-time job**

In reviewing the available literature no references were found in the literature in respect of time allocation to social networking and part-time job. Wong (2000) conceptualises academic commitment as the percentage of time and effort spent on studies. However, the results of the present study seem to be consistent with those of Krause and Coates, (2008) and Human-Vogel (2013) who argue that involvement in studies in terms of time and effort invested may probably be regarded as student engagement (Krause & Coates, 2008; Human-Vogel, 2013). Results also indicate that the application of particular learning strategies function at the task and achievement level of self-regulation and is as such a consequence of commitment and not commitment in itself (Human-Vogel, 2013). The

results of the present study (Table 4.51) show that students who spent 120 minutes or more on studying had higher mean scores on investment size and commitment level. Effective time-allocation was probably reported by students who were willing to invest quality time into studies. The significant correlation between study time and commitment level may probably indicate that some students are more committed to their studies than their counterparts. Whether participants had part-time jobs (Table 4.53) and whether the amount of time they spent on social networking (Table 4.49) had no significant correlation to any of the study variables.

❖ **Satisfaction with study course**

Steger and Kashdan (2007) found significant levels of stability in students' search for meaning and the presence of meaningful experiences in association with general life satisfaction, are positively related to well-being. With reference to a variety of studies on well-being Steger and Kashdan (2007, p. 163) pointed out that individuals who experience their lives as meaningful in relation to life satisfaction tend to display characteristics such as optimism, self-actualisation and positive affect in the absence of maladaptive psychological symptoms such as depression and anxiety. The results of the present study (Table 4.45) provide support for these findings, probably indicating that significant scores on meaningfulness and satisfaction were related to satisfaction with study course. Students who indicated satisfaction with study course might be willing to invest more resources into their studies and also could achieve higher levels of commitment. Students who reported significant scores on authentic pride as a positive self-relevant emotion might be more prone to experiences of positive affect and optimism, and thus more satisfied with life experiences in general (Human-Vogel & van Petegem, 2008).

❖ **Family support**

The person who reverts to emotional cutoff tends to withdraw from intimate family relations, becomes emotionally isolated and pretends to be independent, particularly boasting independence from parents (Skowron & Friedlander, 1998, p. 236). Individuals that are poorly differentiated are at risk of becoming dysfunctional under stress and as a result could face more psychological problems such as chronic anxiety (Skowron & Friedlander, 1998, pp. 235-236). Highly differentiated individuals tend to maintain healthy family relations by staying in satisfying contact with family members of origin (Skowron & Friedlander, 1998, p. 236). The results of the present study support the aforementioned findings (Table 4.54). Significant correlations were found between family support and

emotional cutoff, which might reveal a tendency to revert to emotional cutoff by withdrawing and isolating emotionally from family relations. Individuals who tend to isolate themselves from interpersonal relationships seem to be poorly differentiated and are at risk to become dysfunctional, revealing maladaptive symptoms such as chronic anxiety and depression, accompanied by alcohol and drug related behaviours (Skowron & Friedlander, 1998, p. 236). Hubristic pride significantly correlated with family support which might be related to a tendency to deny the importance of family and boasting emancipation from parents (Skowron & Friedlander, 1998, p. 236).

Cross-cultural differences on the *Differentiation of Self Inventory* have been reported in literature (Chung & Gale, 2009, pp. 25, 28) and findings indicate significant differences, although moderately, between American and Korean college students in respect of family functioning. Korean students' responses reflected a more collectivistic family system. However, both American students and Korean students indicated positive correlations with emotional reactivity, emotional cutoff and I-position. Independence from others and an autonomous self are according to Skowron and Friedlander (1998, pp. 235, 243) of lesser importance in Asian cultures than in Western cultures. Skowron and Schmitt (2003, p. 216) reported an association in respect of level of education and Differentiation of Self Inventory (DSI-R) scores. Particularly, findings indicate that higher levels of education are related to greater emotional cutoff in relationship context. The results of the present study indicate no significant differences in respect of level of education (academic year of study) in an academic context.

5.4 CONTRIBUTION OF THE PRESENT STUDY

5.4.1 THEORETICAL CONTRIBUTION

The results of the present study provide sufficient evidence that the utilisation of the original Investment Model Scale of Rusbult et al. (1998) is not restricted to the interpersonal romantic domain only, but can be extended to and utilised in non-interpersonal domains such as academic and institutional areas (Le & Agnew, 2003). The Academic Commitment Scale (ACS), adapted from the Rusbult et al. (1998) Investment Model Scale, was created to measure commitment in higher education contexts and as such can be considered as an important contribution to the study of commitment. A comparison of the correlations between the commitment, self-differentiation and pride subscales revealed that the newly added meaningfulness subscale performed beyond

expectations and as such provide additional strength to the capacity of the Academic Commitment Scale (ACS) to measure commitment in an academic context. Its value as a measure to assess commitment in a higher education setting seems to be found in its ability to address identity-related aspects of the self in relation to meaning. Compared to satisfaction findings indicate that meaningfulness brought more stability to the level of commitment in learning contexts. Although both meaningfulness and satisfaction share some similarities, findings of the present study revealed that meaningfulness, based on its good performance in respect of measuring academic commitment, can be prolonged despite the presence of dissatisfaction (Human-Vogel & Dippenaar, 2012). Satisfaction, although still an important aspect of commitment, seems to be more subjected to external influences than meaningfulness and as such less stable. It is likely that satisfaction can be regarded as a consequence of meaningful experiences in terms of the role of personal agency in self-regulation (Human-Vogel & Dippenaar, 2012; Human-Vogel, 2013).

The present study contributes in particular to the existing body of literature on the theory of commitment. The inclusion of the newly created identity-related meaningfulness subscale in the Academic Commitment Scale (ACS) provides support for the argument that commitment is about identity-level self-regulation (Human-Vogel, 2013; Lord et al., 2010), because of its positive associations with identity-related constructs such as self-differentiation and pride. The results of the present study revealed that commitment is significantly correlated with the ability to take an I-position in terms of a well differentiated self (Skowron & Friedlander, 1998) in relation to its ability to experience authentic pride (Tracy & Robins, 2007d). Commitment in terms of meaningfulness, satisfaction and investment also had significant correlations with authentic pride and thus supports the notion that commitment may be enhanced by positive affective experiences (Lord et al., 2010) such as authentic pride. Authentic pride also proved to have significant positive correlations with differentiation of self in terms of the fostering of positive self-views in respect of social acceptance and appreciation (North & Swann, 2009). Authentic pride is, among others, responsible for the motivation to persevere in self-regulatory commitments (Williams & DeSteno, 2009). However, it should be noted that hubristic pride turned out to be problematic. No significant correlations were found between hubristic pride and the five subscales of commitment. Hubristic pride also showed no significant correlation with regard to authentic pride, raising the question whether the two constructs are facets of the same construct or two separate independent constructs. In sum, the present study demonstrated that commitment can be defined in terms of high identity-level self-

regulation (Human-Vogel, 2013; Lord et al., 2010), related to the process of differentiation of self in terms of taking a strong I-position in combination with authentic pride in respect of their mutual interaction in the self-regulatory processes. In turn, commitment can be enhanced by a well differentiated self and positive affect such as authentic pride.

Support was also found for the argument that self-regulatory commitment depends on future orientation of the self, which functions on different levels of abstraction and within different time cycles (Lord et al., 2010). In this respect it was found that goal setting in terms of life and learning goals showed positive correlations with meaningfulness, satisfaction, commitment level and authentic pride. Commitment thus seems to operate on the high identity-level of self-regulation, whereas goal commitment is considered to be more task and achievement oriented, actualised on the lower level of self-regulation and therefore more immediate in nature (Lord et al., 2010). Support is thus provided for the theory that commitment presents itself as a future-oriented or teleological construct and as such be reliant on future construals of the self (Human-Vogel, 2013; Lord et al., 2010).

The present study also contributed to a better understanding why some students persist with their studies, while others tend to disengage from studies and pursue alternative options in order to deal with academic related stress. The findings of the study contributed to develop a broader understanding of identity-level commitment in self-regulatory learning in terms of, among others, learner autonomy, effective resource allocation and future-oriented goal commitment based on identity-related self-construals (Human-Vogel, 2013; Lord et al., 2010). Commitment as identity-level self-regulatory learning entails more than mere academic engagement. Student engagement is apparently focused on the role of task and achievement related factors and as such it can be theorised that academic engagement is being affected by future self-construals and in this context engagement can be regarded as a consequence of identity-related commitment (Human-Vogel, 2013; Lord et al., 2010).

5.4.2 METHODOLOGICAL CONTRIBUTION

The results of the present study affirm the methodological utility of the newly created Academic Commitment Scale (ACS), adapted from the Rusbult et al. (1998) Investment Model Scale of Commitment, to predict university students' academic performance and achievement in terms of their level of commitment. From the findings of the present study it is evident that academic engagement entails much more than students' involvement in learning activities related to academic performance and achievement in relation to

commitment. Academic commitment could not be satisfactory explained only in terms of time (percentage) and resource investment in studies, as well as course level progression (Wong, 2000). Experiences of satisfaction with studies alone also do not provide a satisfactory explanation for effective academic commitment. The findings of the present study have revealed that students should experience their involvement in their studies as meaningful. Thus, in order to achieve authentic academic commitment it is evident that meaningful identity investment is required at the high identity-level of self-regulatory learning. The results of the study proved that the newly created Academic Commitment Scale (ACS), with the inclusion of Meaningfulness as an identity-related construct, extended the usefulness of an adapted Rusbult et al. (1998) Investment Model Scale. Being able to measure student commitment in terms of identity-level self-regulation, a better understanding of predicting academic engagement in the long term can be achieved. Identity-investments tend to be more stable and less prone to fluctuations.

5.4.3 PRACTICAL CONTRIBUTION

As a result of the high rate of student drop-out at university level researchers began to shift their focus to factors that are related to student engagement and many orientation programmes were developed to support students to become more engaged in their studies. These programmes are mainly aimed at attempts to familiarise students with the general university environment and involves aspects such as course advice, encounters with fellow students and staff members, as well as the availability of support services and resources (Krause & Coates, 2008, p. 499). The outcome of the present study represents a shift from an engagement-oriented approach (task and achievement related) to self-regulatory processes that are based on commitment as identity-level self-regulatory learning in terms of future-oriented self-construals (Human-Vogel, 2013; Lord et al., 2010).

Evidence found in the present study, claiming that identity-level self-regulatory learning commitment is central to effective student engagement, requires from higher education institutions to revise education policies in terms of support services and programmes. The findings of the present study clearly indicate that personal agency in terms of autonomous learning, effective resource allocation and future-oriented goal-setting functions crucial in self-regulatory learning and should therefore be taken in consideration when support programmes are designed. The focus of programmes should be on the enhancement of students' personal agency abilities with the view to develop a stable and solid sense of

self or identity, enabling them to become self-regulatory and autonomous learners. The aim should be to transform students into self-regulatory learners or “independent learners” (Mckendry & Boyd, 2012) who will possess the ability to take responsibility for their own learning, who can manage their study programmes on their own and who will be able to complete assignments on their own (Mckendry & Boyd, 2012). A well differentiated self in terms of a strong I-position and a well-defined self-perception is needed for successful engagement with studies. In view of the fact that the building and shaping of self-esteem and self-perception are psychological processes, policy makers should consider the involvement of psychologists and educationists when support programmes are designed.

Students should also be made aware of the necessity to become self-regulatory or autonomous learners. The creation of a positive higher education environment will also be beneficial to self-regulatory learning in respect of creating a positive learning climate. The results of the present study indicate that authentic pride is positively related to self-perception and in this respect it should be considered to promote pride in the self as well as pride in being self-disciplined and conscientious. Lecturers can fulfil a decisive role in creating a positive learning environment with regard to lecturer-student relations, fostering students’ perception of themselves and assisting students to manage their studies on their own. The results of the present study also inform higher education institutions and lecturers with regard to aspects that promote student commitment in terms of self-regulatory learning. Lecturers are in a good position to detect low commitment levels by students in terms of low self-perception and self-understanding and therefore should be aware of signs of maladaptive and anti-social behaviours by students. Lecturers should also make sure that they are well informed with regard to student dropout and attrition, as well as with regard to student engagement and student commitment. The results of the present study inform lecturers about the aspects that they have to look out for to identify low committed as well as highly committed students in order to provide assistance in the form of referral for professional assistance or engagement in support programmes.

Psychologists can also take note of the outcome of the present study. Meaninglessness, dissatisfaction, a lack of a willingness to invest and to commit is indicative of a poorly differentiated self in terms of an inability to achieve and take a stable and confident I-position. Emotional reactivity, emotional cutoff and fusion with others in the absence of a well-defined I-position are warning signs of maladjustment. Students who seem to be unable to cope with personal and learning related stress tend to become dysfunctional and are prone to suffer psychological and physical symptoms such as chronic anxiety,

depression and drug/alcohol related problems (Skowron & Friedlander, 1998). Attachment anxiety and negative mood can be ascribed to emotional reactivity, whereas attachment avoidance indicates interpersonal problems (Wei et al., 2005). Hubristic pride is related to narcissistic self-aggrandisement, dominance and neuroticism and therefore could be positively associated with maladaptive and anti-social behaviours such as anger and aggressiveness as an attempt to avoid feelings of shame (Hart & Matsuba, 2007; Tracy & Robins, 2007f). Students who experience low self-esteem and who display symptoms of psychological dysfunction as well as antisocial behaviours should be considered for psychological assistance.

5.5 LIMITATIONS OF THE STUDY

The present study was conducted within a quantitative cross-sectional survey design. Students had to respond to questions/statements on a questionnaire consisting of demographic factors and variables measured with the Academic Commitment Scale (ACS), Differentiation of Self Inventory (DSI-R) and the Authentic and Hubristic Pride Scales (AHP). An important objective of the study was to create a new scale to measure commitment in an academic context. The study was mainly based on quantitative methodological methods and the results were not verified in terms of actual score points of students' academic records. This could exert to some extent a negative influence on the reliability of the study's results. Variables with regard to gender could possibly be confounded because the questionnaire was conducted at two different faculties of the same university. At the first faculty the sample consisted mainly of female students with 14% male participants. The composition of the sample at the second faculty consisted of 78% male participants and the rest female participants. The two samples were thus not balanced in terms of gender, but when the total number of participants was calculated the balance was restored (52% females, 48% males). The interpretation of the data of the cross-sectional study was restricted because it could not be established that higher commitment in relation to self-differentiation and pride will translate into better academic results and higher throughput in terms of completion rates.

A major limitation of the study is related to cultural differences, particularly in terms of the relatedness of self-differentiation and pride to commitment. Western cultures are more individualistic-orientated, whereas a collectivistic approach is more prevalent in American and African cultures. In view of the fact that the sample composition of the present study comprised of only 17% participants from African and other cultures, it was impossible to

get a full picture of the role of individualism versus collectivism on identity-level self-regulatory commitment in the South African context. Western cultures put a high price on individualistic-oriented identities in terms of independence and social status, whereas in African-American cultures identification with the group is highly regarded (Gushue & Constantine, 2003). The pride emotion seems to be culturally differentiated and in collectivistic-oriented cultures pride in the global self is not considered as a desirable emotion as opposed to individualistic-oriented cultures (Tracy & Robins, 2007b).

It should also be mentioned that participants at both faculties were enrolled in courses aimed at preparing them for professional occupations. Consequently, these participants were probably more emotionally matured and thus psychologically better equipped to report on the identity aspects of their personality than students who study courses that are not linked to a particular profession. This probability could have an influence on the results of the present study.

5.6 RECOMMENDATIONS FOR FUTURE RESEARCH

A few recommendations for future research flow from the results of the present study with regard to the aforementioned limitations. As was argued an important objective of the study was to construct a scale that could be utilised to measure commitment in an academic context. The results provide evidence that this goal was achieved and it can be concluded that the new Academic Commitment Scale (ACS) established itself as a reliable scale with sufficient predictive power to assess academic commitment. The addition of the new meaningfulness scale, which performed distinctively well in the present study, strengthened the overall predictive power of the Academic Commitment Scale (ACS). Based on the findings and limitations of the study, the following suggestions are put forward with regard to future research:

- A follow up study should be conducted wherein quantitative and qualitative methodologies are combined with the view to examine the reliability of student responses on the Academic Commitment Scale (ACS) more intensively.
- Sampling procedures should include measures to ensure that the issues of gender and cultural/language groups are adequately addressed in terms of an equal/adequate distribution. I believe it would be worthwhile to investigate the relatedness of identity-related factors to commitment in different culture groups

in respect of the role of individualism versus collectivism in self-differentiation and pride, particularly in terms of the South African higher education context.

- The Fusion with Others subscale of the Differentiation of Self Inventory (DSI-R) was problematic in an academic context in the present study. The removal of the scale from the analysis of the Differentiation of Self Inventory brought more stability to the results of the scale. It is suggested that the performance of the Fusion with Others subscale be reinvestigated in an academic context in a future study. It is also recommended that when the DSI-R scale is introduced to participants, careful consideration should be given to inform participants properly about the reverse order direction of the variables, since most of the variables are presented in the reverse order.
- The hubristic pride subscale also proved to be problematic. No correlations were found between hubristic pride variables and the different commitment variables. Furthermore, authentic pride also showed no significant correlation with hubristic pride variables. Authentic pride strongly correlated positively with most of the Academic Commitment Scale (ACS) variables. In the present study the authentic and hubristic pride scales were established as two separate constructs and future research is suggested to determine whether the two constructs can be regarded as two facets of the same construct or may be representative of two independent constructs.
- In addition, future studies could probably focus on the utilisation of the new Academic Commitment Scale (ACS) in other higher education settings. For example, involving students in a research project who are not trained to enter a professional career. It is likely that such students may structure their identities differently from those students who study to become a professional practitioner. The probability thus exists that differences in the maturity level of identity may have an influence on the results of the ACS when used under different education circumstances.

5.7 CONCLUSION

The findings of the results of the present study were discussed in this chapter. The discussion was primarily based on three subquestions. Correlations between commitment and its correlates self-differentiation and pride were discussed in terms of Subquestion 1.

In the next phase of the discussion Subquestion 2 was addressed in terms of a variety of demographic factors. Self-regulatory learning behaviours in terms of learner autonomy, resource allocation and future-oriented goal commitment were raised next in respect of Subquestion 3. The theoretical and practical contribution of the study, limitations of the study and recommendations for future research were presented in the last phase of the discussion on findings.

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ANNEXURE A

INVITATION TO PARTICIPATE



UNIVERSITEIT VAN PRETORIA
UNIVERSITY OF PRETORIA
YUNIBESITHI YA PRETORIA

Faculty of Education

18 August 2012

Dear Sir/Madam,

I would like to invite you to participate in a study about academic commitment that I am conducting to fulfil the requirements for a PhD (Educational Psychology) degree. I am interested in understanding what factors influence the likelihood that students will persist with their academic studies at university. The results of this study will be presented for examination in a PhD thesis and hopefully also for publication in an academic journal.

Although I will ask you questions about gender, age and other personal information, it is very important for you to note that this study is **completely anonymous** and I will not gather any information that will allow you to be identified by anyone. Do not record your name or student number anywhere on the questionnaire and your identity will remain anonymous to me, your lecturers, my supervisor or anyone else at the university. I will analyse the data statistically and therefore we can assure you of **complete anonymity**.

This module was selected randomly and your participation remains **voluntary**, meaning you do not have to participate if you don't want to. If you decide not to participate, you can simply return an empty questionnaire so it can be used at another time for another participant, but we sincerely hope that you will assist us with this study. When you are done, place your questionnaire in the box in front of the class.

However, if you agree to participate and assist us with this study, please complete the attached questionnaire carefully. It should take about 30 minutes of your time. We are not aware of any risk related to participating in this anonymous study and completing the questionnaire does not carry any significant risk beyond that which you may encounter as a result of class attendance on campus. There are also more sensitive questions that may upset you. If this is the case, and you would like a referral to a counsellor, **ONLY** write your contact number if you wish to obtain a referral to a counsellor.

This study was reviewed and has received ethical clearance from the Faculty of Education Ethics Committee. If you have any questions about the study, you are welcome to contact the Ethics Committee (ethics.education@up.ac.za).

Yours sincerely,



Piet Rabe (PhD candidate)



Dr. Salomè Human-Vogel
(Supervisor)

DEMOGRAPHIC INFORMATION/DEMOGRAFIESE INLIGTING

Please make a cross in the applicable block:/Maak 'n kruisie in die blokkie van jou keuse:

1. Indicate your sex/*Dui jou geslag aan:* Male/*Manlik* 1 Female/*Vroulik* 2 V1
2. How old are you (completed years)?/*Hoe oud is jy (voltooide jare)?* Years/*Jaar* V2
3. What is your home language? (If multilingual, choose language you are most comfortable in)/
Wat is jou huistaal? (Indien meertalig, dui die taal aan waarin jy die gemaklikste is). V3
- Afrikaans 1 English 2 Sepedi 3 IsiZulu 4
- Sesotho 5 SiSwati 6 IsiXhosa 7 IsiNdebele 8
- Setswana 9 Tshivenda 10 Xitsonga 11 Other/*Ander* 12
- If other, please specify:/*Spesifiseer indien ander:*
-

5. In which academic year of study are you at present?/
In watter akademiese studiejear is jy tans? 1 2 3 4 V4
6. Do you feel adequately prepared for university studies?
Voel jy toereikend voorbereid vir universiteitsstudies? Ja/Yes Nee/No V5
7. Do you think you manage your studies effectively?
Dink jy jy bestuur jou studies effektief? Ja/Yes Nee/No V6
8. Do you set learning goals for yourself?
Stel jy leerdoelwitte vir jouself? Ja/Yes Nee/No V7
9. Do you feel satisfied with the course you are studying?
Voel jy tuis in die kursus wat jy gekies het om te studeer? Ja/Yes Nee/No V8
10. Do you have life goals that you are working towards?
Het jy lewensdoelwitte wat jy nastreef? Ja/Yes Nee/No V9
11. Do you have a Facebook / Twitter / social networking account?
Het jy 'n Facebook / Twitter / sosiale netwerk rekening? Ja/Yes Nee/No V10
12. How much time do you spend on social networking sites per day? Minutes V11

				Minute		
13.	Hoeveel tyd spandeer jy op sosiale dag? How much time per day (average) do you spend on studying? Hoeveel tyd per dag (gemiddeld) bestee jy aan jou studies?	0 – 60 minute/s	60 – 120 minute/s	120 minutes or more / of meer		V12
14.	Do you have a part-time job? Het jy 'n deeltydse werk?	Yes Ja		No Nee		V13
15.	If you answered yes, how many hours per week do you work? As jy ja geantwoord het, hoeveel ure per week werk jy?			Hours Ure		V14
16.	Do you feel supported by your family in your studies? Voel jy dat jou gesin jou ondersteun in jou studies?	Yes Ja		No Nee		V15
17.	Do you live in a residence / commune? Woon jy in 'n koshuis / kommune?	Yes Ja		No Nee		V16

Section B: Studying and Learning/Afdeling B: Studeer en Leer (Full scale Alpha .869, n=44)

Please indicate how you feel about your studies. Read each statement carefully and decide to what extent you personally agree or disagree with it. Circle the number that corresponds with your opinion. Make sure you circle a number for every statement/Dui asseblief aan hoe jy in die algemeen oor jou studies voel. Lees elke stelling deeglik en besluit dan in watter mate jy daarmee saamstem of nie saamstem nie. Omkring die syfer wat op jou van toepassing is en maak seker dat jy 'n syfer vir elke stelling omkring:

	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree	
I want to continue with my studies. ./Ek wil voortgaan met my studies.	1	2	3	4	5	6	V17
I am committed to being the best student that I possibly can be./Ek is daartoe verbind om die beste student te wees waartoe ek in staat is.	1	2	3	4	5	6	V18
I would not feel very upset if I could not continue studying./Ek sal nie te onsteld wees as ek nie my studies kan voortsit nie. (.262)	1	2	3	4	5	6	V19
It is likely that I will discontinue my studies and pursue something else./Dit is waarskynlik dat ek my studies sal staak om iets anders na te streef. (.026)	1	2	3	4	5	6	V20
I feel very involved with my studies—very strongly linked to my studies./Ek voel baie sterk betrokke by my studies—baie sterk verbind tot my studies.	1	2	3	4	5	6	V21

I want to continue learning even after I have completed my degree./ <i>Ek wil aanhou leer selfs nadat ek my graad voltooi het.</i>	1	2	3	4	5	6	V22
I believe in life-long learning./ <i>Ek is ingestel op lewenslange leer.</i>	1	2	3	4	5	6	V23
I am determined to complete my studies successfully. / <i>Ek is vasbeslote om my studies suksesvol af te sluit.</i>	1	2	3	4	5	6	V24
I will persist with my studies until I complete my degree. / <i>Ek sal aanhou studeer totdat ek my graad voltooi het.</i>	1	2	3	4	5	6	V25
I am not prepared to give up studying. / <i>Ek is nie bereid om op te gee met my studies nie.</i>	1	2	3	4	5	6	V26
	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree	
My studies give me a great deal of satisfaction./ <i>My studies is vir my baie bevredigend.</i>	1	2	3	4	5	6	V27
I am very happy with my studies./ <i>Ek is baie gelukkig met my studies.</i>	1	2	3	4	5	6	V28
Being able to study is close to ideal./ <i>Om te kan studeer is bykans ideaal.</i>	1	2	3	4	5	6	V29
My studies are fulfilling to me./ <i>Om te studeer is vir my vervullend..</i>	1	2	3	4	5	6	V30
My studies fulfil my needs for intellectual stimulation and intellectual interaction./ <i>My studies vervul my behoefte aan intellektuele stimulasie en intellektuele interaksie.</i>	1	2	3	4	5	6	V31
I enjoy studying. / <i>Ek geniet dit om te studeer.</i>	1	2	3	4	5	6	V32
I feel content with my studies. / <i>Ek voel tevrede met my studies.</i>	1	2	3	4	5	6	V33
Studying is enjoyable. / <i>Studeer is lekker.</i>	1	2	3	4	5	6	V34
	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree	
If I had a choice, I would rather do something else than study (travel, work, socialise) / <i>Indien ek 'n keuse</i>	1	2	3	4	5	6	V35

<p><i>gehad het, sou ek eerder iets anders doen as studeer (reis, werk, sosialiseer).</i></p>								
<p>The alternatives to studying are close to ideal (e.g., work, travel, etc.)/ Die alternatiewe tot studeer is bykans ideaal (bv. werk, reis, ens.). (.111)</p>	1	2	3	4	5	6		V36
<p>If I did not study I would be fine—I would find something more appealing./As ek nie studeer het nie sou dit in orde wees—ek sou iets beter vind om te doen. (-.134)</p>	1	2	3	4	5	6		V37
<p>My alternatives to studying are attractive to me (e.g. relaxing, socialise, time with friends, sport, etc.)/My alternatiewe tot studeer is baie aanloklik (bv. ontspanning, sosialisering, tyd met vriende, sport, ens.). (-.026)</p>	1	2	3	4	5	6		V38
<p>My needs for intellectual stimulation and professional development could be fulfilled just as easily by doing something other than studying./My behoefte aan intellektuele stimulasie en professionele ontwikkeling kan net so goed vervul word deur ander dinge te doen in plaas van te studeer. (-.222)</p>	1	2	3	4	5	6		V39
<p>If I could, I would rather do something other than study. / As ek kon, sou ek eerder iets anders as studeer doen.</p>	1	2	3	4	5	6		V40
<p>There are better things in life than studying. / Daar is beter dinge in die lewe as studeer.</p>	1	2	3	4	5	6		V41
<p>Anything else would be better than having to study. / Enige iets sou beter wees as om te moet studeer.</p>	1	2	3	4	5	6		V42
	Strongly disagree	Disagree	Slightly disagree	Slightly Agree	Agree	Strongly Agree		
<p>I have invested a lot in my studies that would be wasted if I were to quit./Ek het baie in my studies belê wat verlore sal wees indien ek sou staak. (.299)</p>	1	2	3	4	5	6		V43
<p>Many aspects of my life have become linked to my studies and I would lose all of it if I were to quit (e.g., friendships, relationships,</p>	1	2	3	4	5	6		V44

<p>socialising, etc.) / Baie aspekte van my lewe is met my studies vervleg en ek sal dit alles verloor indien ek staak (bv. Vriendskappe, verhoudings, sosialisering ens.) (.215)</p>							
<p>I feel very involved in my studies—like I have put a great deal into it./<i>Ek voel baie betrokke by my studies—asof ek baie daarin belê het.</i></p>	1	2	3	4	5	6	V45
<p>Compared to others I know, I have invested a great deal of time and effort in my studies./<i>Ek het baie tyd en moeite in my studies belê in vergelyking met ander wat ek ken.</i></p>	1	2	3	4	5	6	V46
<p>I could use my time better if I did not have to spend so much of it on my studies./<i>Ek kon my tyd baie beter gebruik het as ek nie so baie tyd aan my studies moes afstaan nie. (.201)</i></p>	1	2	3	4	5	6	V47
<p>I spend a lot of time on my studies. / <i>Ek spandeer baie tyd aan my studies.</i></p>	1	2	3	4	5	6	V48
<p>I usually put a lot of effort into my studies. / <i>Ek sit gewoonlik heelwat in my studies in.</i></p>	1	2	3	4	5	6	V49
<p>I do a lot to ensure success in my studies (attend class, prepare, read, etc.) / <i>Ek doen baie om sukses in my studies te verseker (woon klas by, berei voor, lees, etc.)</i></p>	1	2	3	4	5	6	V50
	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree	
<p>My studies are very meaningful to me./<i>My studies is vir my baie betekenisvol.</i></p>	1	2	3	4	5	6	V51
<p>Being a student allows me to express myself completely./ <i>Student wees laat my toe om myself uit te leef.</i></p>	1	2	3	4	5	6	V52
<p>My approach to my studies reflects who I am as a person./<i>My benadering tot my studies reflekteer die persoon wat ek is.</i></p>	1	2	3	4	5	6	V53
<p>My studies contribute to shaping me as a person./<i>My studies dra by tot my vorming as persoon.</i></p>	1	2	3	4	5	6	V54
<p>I am the kind of person who thrives on studying./<i>Ek is die tipe persoon</i></p>	1	2	3	4	5	6	V55

<i>wat floreer deur te studeer.</i>							
My studies fulfill me./My studies vervul my.	1	2	3	4	5	6	V56
Studying is a central aspect of who I am./ Studeer is 'n sentrale deel van wie ek is.	1	2	3	4	5	6	V57
Studying lends meaning to my life./Om te studeer gee betekenis aan my lewe.	1	2	3	4	5	6	V58
I express myself through my studies. / Ek leef myself uit in my studies.	1	2	3	4	5	6	V59
Studying is an important part of my life. / Studeer is 'n belangrike deel van my lewe.	1	2	3	4	5	6	V60

Section C: Relationships/Afdeling C: Verhoudinge

Please read each statement carefully and decide how much the statement is *generally true* of you on a 1 (not at all) to 6 (very) scale. Be sure to answer **every item** and try to be as honest and accurate as possible in your responses. Circle the number that corresponds with your opinion.

Lees asseblief elke stelling deeglik en besluit tot watter mate dit in die algemeen waar is van jou op 'n 1(Glad nie) tot 6 (baie waar) skaal. Maak seker dat jy elke item beantwoord en probeer om so eerlik en akkuraat as moontlik met jou antwoorde te wees. Omkring die syfer wat met jou mening ooreenstem.

	Not at all true of me						Very true of me	
People have remarked that I'm overly emotional./Mense het al opgemerk dat ek oor-emosioneel is.	1	2	3	4	5	6	V61	
I have difficulty expressing my feelings to people I care for./Ek vind dit moeilik om my gevoelens uit te druk teenoor mense vir wie ek omgee.	1	2	3	4	5	6	V62	
I often feel inhibited around my family./Ek voel dikwels geïnhibeerd in die teenwoordigheid van my gesin.	1	2	3	4	5	6	V63	
I tend to remain pretty calm, even under stress./Ek is geneig om redelik kalm te bly, selfs onder druk.	1	2	3	4	5	6	V64	
I usually need a lot of encouragement from others when starting a job or task./Wanneer ek met werk of 'n taak begin, het ek gewoonlik baie aanmoediging van ander nodig.	1	2	3	4	5	6	V65	
When someone close to me disappoints me, I withdraw from him/her for a time. /Wanneer iemand naby aan my, my teleurstel, onttrek ek my van hom/haar vir 'n ruk..	1	2	3	4	5	6	V66	

No matter what happens in my life, I know that I will never lose my sense of who I am. /Maak nie saak wat in my lewe gebeur nie, ek weet ek sal nooit my sin vir wie ek is verloor nie.	1	2	3	4	5	6	V67
I tend to distance myself when people get too close to me. /Ek is geneig om afstand te skep wanneer mense te na aan my kom.	1	2	3	4	5	6	V68
I want to live up to my parents' expectations of me. /Ek wil aan my ouers se verwagtinge voldoen.	1	2	3	4	5	6	V69
I wish I weren't so emotional. /Ek wens ek was nie so emosioneel nie.	1	2	3	4	5	6	V70
I usually do not change my behaviour simply to please another person. /Ek verander gewoonlik nie my gedrag net om iemand anders tevrede te stel nie.	1	2	3	4	5	6	V71
My spouse/partner/best friend could not tolerate it if I were to express to him/her my true feelings. /My huweliksmaat/metgesel/beste vriend/in sou dit nie kon verdra as ek my ware gevoelens oor sekere sake met hom/haar deel nie.	1	2	3	4	5	6	V72
When my spouse/partner/best friend criticizes me, it bothers me for days. /Wanneer my huweliksmaat/metgesel/beste vriend/in my kritiseer, dan kwel dit my vir dae lank.	1	2	3	4	5	6	V73
At times my feelings get the best of me and I have trouble thinking clearly. /Soms oorweldig my gevoelens my en dan vind ek dit moeilik om helder te dink.	1	2	3	4	5	6	V74
When I am having an argument with someone, I can separate my thoughts about the issue from my feelings about the person. /Wanneer ek met iemand argumenteer, kan ek my mening rondom die kwessie en my gevoelens oor die persoon van mekaar skei.	1	2	3	4	5	6	V75
I'm often uncomfortable when people get too close to me. /Ek voel dikwels ongemaklik as mense te na aan my kom.	1	2	3	4	5	6	V76
I feel a need for approval from virtually every one in my life. /Ek voel 'n behoefte aan goedkeuring van feitlik elke persoon in my lewe.	1	2	3	4	5	6	V77
At times I feel as if I'm riding an emotional roller-coaster. /Somtyds voel dit vir my asof ek op 'n emosionele wiplank ry.	1	2	3	4	5	6	V78
There's no point in getting upset about things I cannot change. /Dit is sinneloos om onsteld te raak oor dinge wat ek nie kan verander nie.	1	2	3	4	5	6	V79
I'm concerned about losing my independence in intimate relationships. /Ek is besorgd daaroor om my onafhanklikheid in intieme verhoudings te	1	2	3	4	5	6	V80

verloor.

I'm overly sensitive to criticism. /Ek is oorsensitief vir kritiek.	1	2	3	4	5	6	V81
I try to live up to my parents' expectations. /Ek probeer om aan my ouers se verwagtinge te voldoen.	1	2	3	4	5	6	V82
I'm fairly self-accepting. /Ek is redelik self-aanvaardend..	1	2	3	4	5	6	V83
I often feel that my spouse/partner/best friend wants too much from me. /Ek voel dikwels dat my huweliksmaat/metgesel/beste vriend/in te veel van my verwag.	1	2	3	4	5	6	V84
I often agree with others just to appease them. /Ek stem dikwels met ander saam net om hulle tevrede te stel.	1	2	3	4	5	6	V85
If I had an argument with my spouse/partner/best friend, I tend to think about it all day. /Indien ek 'n argument met my huweliksmaat/metgesel/beste vriend/in gehad het, is ek geneig om die hele dag daaroor te dink.	1	2	3	4	5	6	V86
I am able to say "no" to others even when I feel pressured by them. / Ek kan vir ander "nee" sê selfs al voel dit of hulle druk op my plaas.	1	2	3	4	5	6	V87
When one of my relationships becomes very intense, I feel the urge to run away from it. /Wanneer een van my verhoudings te intens raak, voel ek lus om daarvan weg te hardloop.	1	2	3	4	5	6	V88
Arguments with my parent(s) or sibling(s) can still make me feel awful. /Argumente met my ouer(s) of my broer(s)/suster(s) kan my steeds aaklig laat voel.	1	2	3	4	5	6	V89
If someone is upset with me, I can't seem to let it go easily. /Wanneer iemand omgekrap is met my, kan ek nie maklik daarvan vergeet nie.	1	2	3	4	5	6	V90
I'm less concerned that others approve of me than I am in doing what I think is right. /Ander se goedkeuring is vir my minder belangrik as om te doen wat ek dink reg is.	1	2	3	4	5	6	V91
I would never consider turning to any of my family members for emotional support. /Ek sal dit nooit oorweeg om enige van my gesinslede te nader vir emosionele ondersteuning nie.	1	2	3	4	5	6	V92
I often feel unsure when others are not around to help me make a decision. /Ek voel dikwels onseker wanneer daar niemand is om my te help om 'n besluit te neem nie.	1	2	3	4	5	6	V93
I'm very sensitive to being hurt by others. /Ek is baie fyngvoelig daarvoor om deur ander	1	2	3	4	5	6	V94

seergemaak te word.

My self-esteem really depends on how others think of me. /My selfbeeld is werklik afhanklik van hoe ander oor my dink.	1	2	3	4	5	6	V95
When I'm with my spouse/partner/best friend, I often feel smothered./Ek voel dikwels ek versmoor wanneer ek saam met my huweliksmaat/metgesel/beste vriend/in is.	1	2	3	4	5	6	V96
When making decisions, I seldom worry about what others will think./Wanneer ek besluite neem, bekommer ek my selde oor wat ander sal dink.	1	2	3	4	5	6	V97
I often wonder about the kind of impression I create. /Ek wonder dikwels oor die indruk wat ek skep.	1	2	3	4	5	6	V98
When things go wrong, talking about them usually makes it worse. /As dinge verkeerd gaan, maak praat daaroor dit net erger.	1	2	3	4	5	6	V99
I feel things more intensely than others do. /Ek beleef dinge meer intens as ander.	1	2	3	4	5	6	V100
I usually do what I believe is right regardless of what others say. /Ek doen gewoonlik dit wat ek dink is reg afgesien van wat ander sê.	1	2	3	4	5	6	V101
Our relationship might be better if my spouse/partner/best friend would give me the space I need. /Ons verhouding sou beter wees as my huweliksmaat/metgesel/beste vriend/in my die ruimte gee wat ek nodig het.	1	2	3	4	5	6	V102
I tend to feel pretty stable under stress. /Ek is geneig om redelik stabiel te voel onder druk.	1	2	3	4	5	6	V103
Sometimes I feel sick after arguing with my spouse/partner./best friend. / Ek voel soms siek as ek met my huweliksmaat/metgesel/beste vriend/in baklei het.	1	2	3	4	5	6	V104
I feel it's important to hear my parents' opinions before making decisions. /Ek voel dit is belangrik dat ek my ouers se opinies in ag neem voordat ek besluite neem.	1	2	3	4	5	6	V105
I worry about people close to me getting sick, hurt, or upset. /Ek bekommer my daaroor as persone na aan my siek word, seergemaak word of ontsteld is.	1	2	3	4	5	6	V106

Section D: Pride/Afdeling D: Trots

These are statements concerning your thoughts and feelings about yourself in terms of pride. Please read each statement carefully and then rate yourself on a 1 ((not at all true of me) to 5 (very true of me) scale. Try to be as honest and accurate as possible in your responses. Circle the number that describes you best and make sure you **circle** a number for each statement: /

Die volgende is stellings in verband met jou menings en gevoelens in terme van trots. Lees asseblief elke stelling deeglik en beoordeel jou dan self op 'n skaal vanaf 1 (glad nie waar van my nie) tot 5 (baie waar van my). Maak seker dat jy elke item beantwoord en probeer om so eerlik en akkuraat as moontlik met jou

	Not at all true of me				Very true of me	
I feel accomplished./ <i>Ek voel bekwaam.</i>	1	2	3	4	5	V107
I feel like I have achieved./ <i>Ek voel asof ek presteer het.</i>	1	2	3	4	5	V108
I feel arrogant./ <i>Ek voel arrogant.</i>	1	2	3	4	5	V109
I feel conceited./ <i>Ek voel selfvoldaan.</i>	1	2	3	4	5	V110
I feel confident./ <i>Ek voel selfversekerd.</i>	1	2	3	4	5	V111
I feel like I am egotistical./ <i>Ek voel asof ek selfgesentreerd is.</i>	1	2	3	4	5	V112
I feel fulfilled./ <i>Ek voel vervuld.</i>	1	2	3	4	5	V113
I feel pompous./ <i>Ek voel vernaam.</i>	1	2	3	4	5	V114
I feel productive./ <i>Ek voel produktief.</i>	1	2	3	4	5	V115
I feel I have self-worth./ <i>Ek voel dat ek eiewaarde het.</i>	1	2	3	4	5	V116
I feel smug./ <i>Ek voel selfingenome.</i>	1	2	3	4	5	V117
I feel like I am snobbish./ <i>Ek voel asof ek snobisties is.</i>	1	2	3	4	5	V118
I feel like I am stuck-up./ <i>Ek voel asof ek neusoptrekkerig is.</i>	1	2	3	4	5	V119
I feel successful./ <i>Ek voel suksesvol.</i>	1	2	3	4	5	V120

Thank you / Baie dankie! Please check that all questions were answered / Kyk asseblief dat alle vrae beantwoord is.

ANNEXURE C

MAIN STUDY QUESTIONNAIRE

DEMOGRAPHIC INFORMATION/DEMOGRAFIESE INLIGTING

Please make a cross in the applicable block:/Maak 'n kruisie in die blokkie van jou keuse:

- Indicate your sex/*Dui jou geslag aan:* Male/*Manlik* 1 Female/*Vroulik* 2 V1
- How old are you (completed years)?/*Hoe oud is jy (voltooide jare)?* Years/*Jaar* V2
- What is your home language? (If multilingual, choose language you are most comfortable in)/*Wat is jou huistaal? (Indien meertalig, dui die taal aan waarin jy die gemaklikste is).* V3

Afr ika an s	<input type="checkbox"/> 1	English	<input type="checkbox"/> 2	Sepedi	<input type="checkbox"/> 3	IsiZulu	<input type="checkbox"/> 4
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Se sot ho	<input type="checkbox"/> 5	SiSwati	<input type="checkbox"/> 6	IsiXhosa	<input type="checkbox"/> 7	IsiNdebele	<input type="checkbox"/> 8
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Se ts wa na	<input type="checkbox"/> 9	Tshivenda	<input type="checkbox"/> 10	Xitsonga	<input type="checkbox"/> 11	Other/ <i>Ander</i>	<input type="checkbox"/> 12
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If other, please specify: /*Spesifiseer indien ander:*

- | | | | | | | |
|----|---|----------------------------|----------------------------|----------------------------|----------------------------|----|
| 4. | In which academic year of study are you at present?/
<i>In watter akademiese studiejaar is jy tans?</i> | <input type="checkbox"/> 1 | <input type="checkbox"/> 2 | <input type="checkbox"/> 3 | <input type="checkbox"/> 4 | V4 |
| 5. | Do you feel adequately prepared for university studies?
<i>Voel jy toereikend voorbereid vir universiteitsstudies?</i> | Ja
Yes | <input type="checkbox"/> | Nee
No | <input type="checkbox"/> | V5 |
| 6. | Do you think you manage your studies effectively?
<i>Dink jy jy bestuur jou studies effektief?</i> | Ja
Yes | <input type="checkbox"/> | Nee
No | <input type="checkbox"/> | V6 |
| 7. | Do you set learning goals for yourself?
<i>Stel jy leerdoelwitte vir jouself?</i> | Ja
Yes | <input type="checkbox"/> | Nee
No | <input type="checkbox"/> | V7 |
| 8. | Do you feel satisfied with the course you are studying?
<i>Voel jy tuis in die kursus wat jy gekies het om te studeer?</i> | Ja
Yes | <input type="checkbox"/> | Nee
No | <input type="checkbox"/> | V8 |
| 9. | Do you have life goals that you are working towards?
<i>Het jy lewensdoelwitte wat jy nastreef?</i> | Ja
Yes | <input type="checkbox"/> | Nee
No | <input type="checkbox"/> | V9 |

10.	Do you have a Facebook / Twitter / social networking account? <i>Het jy 'n Facebook / Twitter / sosiale netwerk rekening?</i>	Ja Yes		Nee No		V10
11.	How much time do you spend on social networking sites per day? <i>Hoeveel tyd spandeer jy op sosiale netwerke per dag?</i>			Minutes Minute		V11
12.	How much time per day (average) do you spend on studying? <i>Hoeveel tyd per dag (gemiddeld) bestee jy aan jou studies?</i>		0 – 60 minute /s	60 – 120 minute/ s	120 minutes or more / of meer	V12
13.	Do you have a part-time job? <i>Het jy 'n deeltydse werk?</i>	Yes Ja		No Nee		V13
14.	If you answered yes, how many hours per week do you work? <i>As jy ja geantwoord het, hoeveel ure per week werk jy?</i>			Hours Ure		V14
15.	Do you feel supported by your family in your studies? <i>Voel jy dat jou gesin jou ondersteun in jou studies?</i>	Yes Ja		No Nee		V15
16.	Do you live in a residence / commune? <i>Woon jy in 'n koshuis / kommune?</i>	Yes Ja		No Nee		V16

Section B: Studying and Learning/Afdeling B: Studeer en Leer

Please indicate how you feel about your studies. Read each statement carefully and decide to what extent you personally agree or disagree with it. Circle the number that corresponds with your opinion. Make sure you circle a number for every statement/*Dui asseblief aan hoe jy in die algemeen oor jou studies voel. Lees elke stelling deeglik en besluit dan in watter mate jy daarmee saamstem of nie saamstem nie. Omkring die syfer wat op jou van toepassing is en maak seker dat jy 'n syfer vir elke stelling omkring.*

	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree	
I want to continue with my studies. <i>Ek wil voortgaan met my studies.</i>	1	2	3	4	5	6	V17
I am committed to being the best student that I possibly can be. <i>Ek is daartoe verbind om die beste student te wees waartoe ek in staat is.</i>	1	2	3	4	5	6	V18
I feel very involved with my studies—very strongly linked to my studies. <i>Ek voel baie sterk betrokke by my studies—baie sterk verbind tot my studies.</i>	1	2	3	4	5	6	V19
I want to continue learning even after I have completed my degree. <i>Ek wil aanhou leer selfs</i>	1	2	3	4	5	6	V20

<i>nadat ek my graad voltooi het.</i>							
I believe in life-long learning./ <i>Ek is ingestel op lewenslange leer.</i>	1	2	3	4	5	6	V21
I am determined to complete my studies successfully. / <i>Ek is vasbeslote om my studies suksesvol af te sluit.</i>	1	2	3	4	5	6	V22
I will persist with my studies until I complete my degree. / <i>Ek sal aanhou studeer totdat ek my graad voltooi het.</i>	1	2	3	4	5	6	V23
I am not prepared to give up studying. / <i>Ek is nie bereid om op te gee met my studies nie.</i>	1	2	3	4	5	6	V24
	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree	
My studies give me a great deal of satisfaction./ <i>My studies is vir my baie bevredigend.</i>	1	2	3	4	5	6	V25
I am very happy with my studies./ <i>Ek is baie gelukkig met my studies.</i>	1	2	3	4	5	6	V26
Being able to study is close to ideal./ <i>Om te kan studeer is bykans ideaal.</i>	1	2	3	4	5	6	V27
My studies are fulfilling to me./ <i>Om te studeer is vir my vervullend..</i>	1	2	3	4	5	6	V28
My studies fulfil my needs for intellectual stimulation and intellectual interaction./ <i>My studies vervul my behoefte aan intellektuele stimulasie en intellektuele interaksie.</i>	1	2	3	4	5	6	V29
I enjoy studying. / <i>Ek geniet dit om te studeer.</i>	1	2	3	4	5	6	V30
I feel content with my studies. / <i>Ek voel tevrede met my studies.</i>	1	2	3	4	5	6	V31
Studying is enjoyable. / <i>Studeer is lekker.</i>	1	2	3	4	5	6	V32
	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree	
If I had a choice, I would rather do something else than study (travel, work, socialise) / <i>Indien ek 'n keuse gehad het, sou ek eerder iets anders doen as</i>	1	2	3	4	5	6	V33

	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree	
studeer (reis, werk, sosialiseer). If I could, I would rather do something other than study. / <i>As ek kon, sou ek eerder iets anders as studeer doen.</i> There are better things in life than studying. / <i>Daar is beter dinge in die lewe as studeer.</i> Anything else would be better than having to study. / <i>Enige iets sou beter wees as om te moet studeer.</i>	1	2	3	4	5	6	V34
	1	2	3	4	5	6	V35
	1	2	3	4	5	6	V36
I feel very involved in my studies—like I have put a great deal into it./ <i>Ek voel baie betrokke by my studies—asof ek baie daarin belê het.</i>	1	2	3	4	5	6	V37
Compared to others I know, I have invested a great deal of time and effort in my studies./ <i>Ek het baie tyd en moeite in my studies belê in vergelyking met ander wat ek ken.</i>	1	2	3	4	5	6	V38
I spend a lot of time on my studies. / <i>Ek spandeer baie tyd aan my studies.</i>	1	2	3	4	5	6	V39
I usually put a lot of effort into my studies. / <i>Ek sit gewoonlik heelwat in my studies in.</i>	1	2	3	4	5	6	V40
I do a lot to ensure success in my studies (attend class, prepare, read, etc.) / <i>Ek doen baie om sukses in my studies te verseker (woon klas by, berei voor, lees, etc.)</i>	1	2	3	4	5	6	V41
My studies are very meaningful to me./ <i>My studies is vir my baie betekenisvol.</i>	1	2	3	4	5	6	V42
Being a student allows me to express myself completely./ <i>Student wees laat my toe om myself uit te leef.</i>	1	2	3	4	5	6	V43
My approach to my studies reflects who I am as a person./ <i>My benadering tot my studies</i>	1	2	3	4	5	6	V44

<i>reflekteer die persoon wat ek is.</i>							
My studies contribute to shaping me as a person./My studies dra by tot my vorming as persoon.	1	2	3	4	5	6	V45
I am the kind of person who thrives on studying./Ek is die tipe persoon wat floreer deur te studeer.	1	2	3	4	5	6	V46
My studies fulfill me./My studies vervul my.	1	2	3	4	5	6	V47
Studying is a central aspect of who I am./ Studeer is 'n sentrale deel van wie ek is.	1	2	3	4	5	6	V48
Studying lends meaning to my life./Om te studeer gee betekenis aan my lewe.	1	2	3	4	5	6	V49
I express myself through my studies. / Ek leef myself uit in my studies.	1	2	3	4	5	6	V50
Studying is an important part of my life. / Studeer is 'n belangrike deel van my lewe.	1	2	3	4	5	6	V51

Section C: Relationships/Afdeling C: Verhoudinge

Please read each statement carefully and decide how much the statement is *generally true* of you on a 1 (not at all) to 6 (very) scale. Be sure to answer **every item** and try to be as honest and accurate as possible in your responses. Circle the number that corresponds with your opinion.

Lees asseblief elke stelling deeglik en besluit tot watter mate dit in die algemeen waar is van jou op 'n 1(Glad nie) tot 6 (baie waar) skaal. Maak seker dat jy elke item beantwoord en probeer om so eerlik en akkuraat as moontlik met jou antwoorde te wees. Omkring die syfer wat met jou mening ooreenstem.

	Not at all true of me						Very true of me	
People have remarked that I'm overly emotional./Mense het al opgemerk dat ek oor-emosioneel is.	1	2	3	4	5	6	V52	
I have difficulty expressing my feelings to people I care for./Ek vind dit moeilik om my gevoelens uit te druk teenoor mense vir wie ek omgee.	1	2	3	4	5	6	V53	
I often feel inhibited around my family./Ek voel dikwels geïnhibeerd in die teenwoordigheid van my gesin.	1	2	3	4	5	6	V54	
I tend to remain pretty calm, even under stress./Ek is geneig om redelik kalm te bly, selfs onder druk.	1	2	3	4	5	6	V55	

I usually need a lot of encouragement from others when starting a job or task. /Wanneer ek met werk of 'n taak begin, het ek gewoonlik baie aanmoediging van ander nodig.	1	2	3	4	5	6	V56
When someone close to me disappoints me, I withdraw from him/her for a time. /Wanneer iemand naby aan my, my teleurstel, onttrek ek my van hom/haar vir 'n ruk..	1	2	3	4	5	6	V57
No matter what happens in my life, I know that I'll never lose my sense of who I am. /Maak nie saak wat in my lewe gebeur nie, ek weet ek sal nooit my sin vir wie ek is verloor nie.	1	2	3	4	5	6	V58
I tend to distance myself when people get too close to me. /Ek is geneig om afstand te skep wanneer mense te na aan my kom.	1	2	3	4	5	6	V59
I want to live up to my parents' expectations of me. /Ek wil aan my ouers se verwagtinge voldoen.	1	2	3	4	5	6	V60
I wish I weren't so emotional. /Ek wens ek was nie so emosioneel nie.	1	2	3	4	5	6	V61
I usually do not change my behaviour simply to please another person. /Ek verander gewoonlik nie my gedrag net om iemand anders tevrede te stel nie.	1	2	3	4	5	6	V62
My spouse/partner/best friend could not tolerate it if I were to express to him/her my true feelings. /My huweliksmaat/metgesel/beste vriend/in sou dit nie kon verdra as ek my ware gevoelens oor sekere sake met hom/haar deel nie.	1	2	3	4	5	6	V63
When my spouse/partner/best friend criticizes me, it bothers me for days. /Wanneer my huweliksmaat/metgesel/beste vriend/in my kritiseer, dan kwel dit my vir dae lank.	1	2	3	4	5	6	V64
At times my feelings get the best of me and I have trouble thinking clearly. /Soms oorweldig my gevoelens my en dan vind ek dit moeilik om helder te dink.	1	2	3	4	5	6	V65
When I am having an argument with someone, I can separate my thoughts about the issue from my feelings about the person. /Wanneer ek met iemand argumenteer, kan ek my mening rondom die kwessie en my gevoelens oor die persoon van mekaar skei.	1	2	3	4	5	6	V66
I'm often uncomfortable when people get too close to me. /Ek voel dikwels ongemaklik as mense te na aan my kom.	1	2	3	4	5	6	V67

I feel a need for approval from virtually every one in my life. /Ek voel 'n behoefte aan goedkeuring van feitlik elke persoon in my lewe.	1	2	3	4	5	6	V68
At times I feel as if I'm riding an emotional roller-coaster. /Somtyds voel dit vir my asof ek op 'n emosionele wiplank ry.	1	2	3	4	5	6	V69
There's no point in getting upset about things I cannot change. /Dit is sinneloos om onsteld te raak oor dinge wat ek nie kan verander nie.	1	2	3	4	5	6	V70
I'm concerned about losing my independence in intimate relationships. /Ek is besorgd daaroor om my onafhanklikheid in intieme verhoudings te verloor.	1	2	3	4	5	6	V71
I'm overly sensitive to criticism. /Ek is oorsensitief vir kritiek.	1	2	3	4	5	6	V72
I try to live up to my parents' expectations. /Ek probeer om aan my ouers se verwagtinge te voldoen.	1	2	3	4	5	6	V73
I'm fairly self-accepting. /Ek is redelik self-aanvaardend..	1	2	3	4	5	6	V74
I often feel that my spouse/partner/best friend wants too much from me. /Ek voel dikwels dat my huweliksmaat/metgesel/beste vriend/in te veel van my verwag.	1	2	3	4	5	6	V75
I often agree with others just to appease them. /Ek stem dikwels met ander saam net om hulle tevrede te stel.	1	2	3	4	5	6	V76
If I had an argument with my spouse/partner/best friend, I tend to think about it all day. /Indien ek 'n argument met my huweliksmaat/metgesel/beste vriend/in gehad het, is ek geneig om die hele dag daaroor te dink.	1	2	3	4	5	6	V77
I am able to say "no" to others even when I feel pressured by them. / Ek kan vir ander "nee" sê selfs al voel dit of hulle druk op my plaas.	1	2	3	4	5	6	V78
When one of my relationships becomes very intense, I feel the urge to run away from it. /Wanneer een van my verhoudings te intens raak, voel ek lus om daarvan weg te hardloop.	1	2	3	4	5	6	V79
Arguments with my parent(s) or sibling(s) can still make me feel awful. /Argumente met my ouer(s) of my broer(s)/suster(s) kan my steeds aaklig laat voel.	1	2	3	4	5	6	V80
If someone is upset with me, I can't seem to let it go easily. /Wanneer iemand omgekrap is met my, kan ek nie maklik daarvan vergeet	1	2	3	4	5	6	V81

nie.

I'm less concerned that others approve of me than I am in doing what I think is right. / <i>Ander se goedkeuring is vir my minder belangrik as om te doen wat ek dink reg is.</i>	1	2	3	4	5	6	V82
I would never consider turning to any of my family members for emotional support. / <i>Ek sal dit nooit oorweeg om enige van my gesinslede te nader vir emosionele ondersteuning nie.</i>	1	2	3	4	5	6	V83
I often feel unsure when others are not around to help me make a decision. / <i>Ek voel dikwels onseker wanneer daar niemand is om my te help om 'n besluit te neem nie.</i>	1	2	3	4	5	6	V84
I'm very sensitive to being hurt by others. / <i>Ek is baie fyngemoedig daarvoor om deur ander seergemaak te word.</i>	1	2	3	4	5	6	V85
My self-esteem really depends on how others think of me. / <i>My selfbeeld is werklik afhanklik van hoe ander oor my dink.</i>	1	2	3	4	5	6	V86
When I'm with my spouse/partner/best friend, I often feel smothered. / <i>Ek voel dikwels ek versmoor wanneer ek saam met my huweliksmat/metgesel/beste vriend/in is.</i>	1	2	3	4	5	6	V87
When making decisions, I seldom worry about what others will think. / <i>Wanneer ek besluite neem, bekommer ek my selde oor wat ander sal dink.</i>	1	2	3	4	5	6	V88
I often wonder about the kind of impression I create. / <i>Ek wonder dikwels oor die indruk wat ek skep.</i>	1	2	3	4	5	6	V89
When things go wrong, talking about them usually makes it worse. / <i>As dinge verkeerd gaan, maak praat daaroor dit net erger.</i>	1	2	3	4	5	6	V90
I feel things more intensely than others do. / <i>Ek beleef dinge meer intens as ander.</i>	1	2	3	4	5	6	V91
I usually do what I believe is right regardless of what others say. / <i>Ek doen gewoonlik dit wat ek dink is reg afgesien van wat ander sê.</i>	1	2	3	4	5	6	V92
Our relationship might be better if my spouse/partner/best friend would give me the space I need. / <i>Ons verhouding sou beter wees as my huweliksmat/metgesel/beste vriend/in my die ruimte gee wat ek nodig het.</i>	1	2	3	4	5	6	V93
I tend to feel pretty stable under stress. / <i>Ek is geneig om redelik stabiel te voel onder druk.</i>	1	2	3	4	5	6	V94
Sometimes I feel sick after arguing with my spouse/partner./best friend. / <i>Ek voel soms</i>	1	2	3	4	5	6	V95

siek as ek met huweliksmat/metgesel/beste vriend/in baklei het.

I feel it's important to hear my parents' opinions before making decisions. */Ek voel dit is belangrik dat ek my ouers se opinies in ag neem voordat ek besluite neem.*

1 2 3 4 5 6 V96

I worry about people close to me getting sick, hurt, or upset. */Ek bekommer my daaroor as persone na aan my siek word, seergemaak word of ontsteld is.*

1 2 3 4 5 6 V97

Section D: Pride/Afdeling D: Trots

These are statements concerning your thoughts and feelings about yourself in terms of pride. Please read each statement carefully and then rate yourself on a 1 ((not at all true of me) to 5 (very true of me) scale. Try to be as honest and accurate as possible in your responses. Circle the number that describes you best and make sure you **circle** a number for each statement: /

*Die volgende is stellings in verband met jou menings en gevoelens in terme van trots. Lees asseblief elke stelling deeglik en beoordeel jou dan self op 'n skaal vanaf 1 (glad nie waar van my nie) tot 5 (baie waar van my). Maak seker dat jy elke item beantwoord en probeer om so eerlik en akkuraat as moontlik met jou antwoorde te wees. **Omkring** die syfer wat jou die best besryf:*

	Not at all true of me					Very true of me	
I feel accomplished./ <i>Ek voel bekwaam.</i>	1	2	3	4	5		V98
I feel like I have achieved./ <i>Ek voel asof ek presteer het.</i>	1	2	3	4	5		V99
I feel arrogant./<i>Ek voel arrogant.</i>	1	2	3	4	5		V100
I feel conceited./<i>Ek voel selfvoldaan.</i>	1	2	3	4	5		V101
I feel confident./ <i>Ek voel selfversekerd.</i>	1	2	3	4	5		V102
I feel like I am egotistical./<i>Ek voel asof ek selfgesentreerd is.</i>	1	2	3	4	5		V103
I feel fulfilled./ <i>Ek voel vervuld.</i>	1	2	3	4	5		V104
I feel pompous./<i>Ek voel vernaam.</i>	1	2	3	4	5		V105
I feel productive./ <i>Ek voel produktief.</i>	1	2	3	4	5		V106
I feel I have self-worth./ <i>Ek voel dat ek eiewaarde het.</i>	1	2	3	4	5		V107
I feel smug./<i>Ek voel selfingenome.</i>	1	2	3	4	5		V108
I feel like I am snobbish./<i>Ek voel asof ek snobisties is.</i>	1	2	3	4	5		V109
I feel like I am stuck-up./<i>Ek voel asof ek neusoptrekkerig is.</i>	1	2	3	4	5		V110

Thank you / Baie dankie! Please check that all questions were answered / Kyk asseblief dat alle vrae beantwoord is.

ANNEXURE D

Table 4.2: Commitment: Item statistics

	Mean	Std. Deviation	N
CL1	5.73	.684	240
CL2	5.26	.901	240
CL3	4.94	.984	240
CL4	5.04	1.201	240
CL5	5.31	.975	240
CL6	5.75	.629	240
CL7	5.78	.636	240
CL8	5.75	.677	240
CS1	5.03	.823	240
CS2	5.05	.929	240
CS3	5.15	.864	240
CS4	5.02	.901	240
CS5	5.14	.911	240
CS6	4.73	1.100	240
CS7	4.93	.930	240
CS8	4.48	1.211	240
CA1	3.07	1.521	240
CA2	2.76	1.449	240
CA3	3.09	1.520	240
CA4	2.01	1.123	240
CI1	4.93	.853	240
CI2	4.72	1.056	240
CI3	4.72	1.036	240
CI4	4.89	.977	240
CI5	5.06	.880	240
CM1	5.20	.795	240
CM2	4.65	1.162	240
CM3	4.78	1.189	240
CM4	5.05	.854	240
CM5	4.23	1.228	240
CM6	4.52	1.054	240
CM7	4.17	1.233	240
CM8	4.41	1.261	240
CM9	4.13	1.330	240
CM10	5.04	.876	240

Table 4.3: Commitment: Item-total statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
CL1	158.76	290.017	.410	.896
CL2	159.23	279.903	.641	.892
CL3	159.55	276.159	.701	.891
CL4	159.45	283.004	.386	.896
CL5	159.18	285.740	.405	.895
CL6	158.73	289.529	.473	.895
CL7	158.70	291.592	.371	.896
CL8	158.74	290.303	.403	.896
CS1	159.46	279.942	.706	.891
CS2	159.43	278.441	.669	.891
CS3	159.34	282.812	.567	.893
CS4	159.47	281.508	.587	.893
CS5	159.35	279.377	.651	.892
CS6	159.76	275.023	.652	.891
CS7	159.55	279.920	.619	.892
CS8	160.01	277.616	.519	.893
CA1	161.42	312.046	-.266	.911
CA2	161.73	315.125	-.334	.912
CA3	161.40	312.950	-.283	.912
CA4	162.48	310.034	-.284	.907
CI1	159.56	281.693	.616	.893
CI2	159.77	279.728	.543	.893
CI3	159.77	279.744	.555	.893
CI4	159.60	279.251	.608	.892
CI5	159.43	281.110	.615	.892
CM1	159.28	281.716	.663	.892
CM2	159.84	277.994	.534	.893
CM3	159.71	274.856	.603	.892
CM4	159.43	284.646	.509	.894
CM5	160.26	273.115	.626	.891
CM6	159.96	273.619	.726	.890
CM7	160.32	274.221	.595	.892
CM8	160.08	273.962	.587	.892
CM9	160.36	270.367	.638	.891
CM10	159.45	282.915	.555	.893

Table 4.10: Self-differentiation: Item statistics

	Mean	Std. Deviation	N
SD1ER	4.24	1.536	231
SD2EC	3.85	1.686	231
SD3EC	4.11	1.545	231
SD4IP	4.15	1.485	231
SD5FO	4.37	1.515	231
SD6ER	3.14	1.598	231
SD7IP	4.93	1.183	231
SD8EC	4.17	1.567	231
SD9FO	2.37	1.497	231
SD10ER	4.46	1.654	231
SD11IP	4.20	1.614	231
SD12EC	4.66	1.647	231
SD13FO	3.96	1.543	231
SD14ER	3.60	1.579	231
SD15IP	3.72	1.472	231
SD16EC	3.87	1.614	231
SD17FO	3.92	1.640	231
SD18ER	4.26	1.533	231
SD19IP	4.32	1.500	231
SD20EC	3.85	1.636	231
SD21ER	3.95	1.511	231
SD22FO	2.51	1.492	231
SD23IP	4.68	1.202	231
SD24EC	4.23	1.548	231
SD25FO	3.96	1.506	231
SD26ER	3.19	1.586	231
SD27IP	4.32	1.538	231
SD28EC	4.10	1.503	231
SD29FO	2.77	1.403	231
SD30ER	3.20	1.587	231
SD31IP	4.00	1.537	231
SD32EC	4.45	1.625	231
SD33FO	3.97	1.453	231
SD34ER	3.68	1.549	231
SD35IP	4.30	1.421	231
SD36EC	4.52	1.423	231
SD37FO	3.45	1.473	231
SD38ER	2.82	1.313	231
SD39EC	4.40	1.534	231
SD40ER	3.78	1.548	231
SD41IP	4.59	1.240	231
SD42EC	4.18	1.547	231
SD43IP	4.08	1.441	231
SD44FO	3.84	1.651	231
SD45FO	2.71	1.402	231
SD46FO	2.42	1.466	231

Table 4.11: Self-differentiation: Item-total statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Squared Multiple Correlation	Cronbach's Alpha if Item Deleted
SD1ER	173.95	811.738	.439	.544	.892
SD2EC	174.35	809.180	.423	.549	.893
SD3EC	174.09	814.119	.410	.390	.893
SD4IP	174.05	824.668	.302	.517	.894
SD5FO	173.83	811.141	.454	.487	.892
SD6ER	175.06	813.015	.406	.400	.893
SD7IP	173.27	832.499	.274	.335	.895
SD8EC	174.03	813.683	.408	.592	.893
SD9FO	175.83	841.512	.102	.746	.897
SD10ER	173.74	802.217	.509	.578	.891
SD11IP	174.00	838.049	.128	.318	.897
SD12EC	173.54	816.448	.355	.412	.894
SD13FO	174.24	799.041	.587	.542	.890
SD14ER	174.60	794.944	.620	.601	.890
SD15IP	174.48	834.715	.185	.346	.896
SD16EC	174.35	818.418	.341	.532	.894
SD17FO	174.28	800.188	.536	.468	.891
SD18ER	173.94	799.832	.582	.584	.891
SD19IP	173.88	820.550	.347	.346	.894
SD20EC	174.35	808.846	.442	.385	.892
SD21ER	174.25	791.850	.688	.633	.889
SD22FO	175.69	833.274	.199	.766	.896
SD23IP	173.52	822.228	.420	.523	.893
SD24EC	173.99	808.010	.479	.558	.892
SD25FO	174.22	809.977	.473	.466	.892
SD26ER	175.02	803.605	.516	.540	.891
SD27IP	173.89	830.745	.221	.338	.895
SD28EC	174.11	814.276	.418	.486	.893
SD29FO	175.43	826.080	.305	.539	.894
SD30ER	175.00	808.632	.459	.512	.892
SD31IP	174.21	851.102	-.009	.197	.898
SD32EC	173.75	832.719	.184	.362	.896
SD33FO	174.24	808.239	.510	.538	.892
SD34ER	174.52	796.689	.612	.587	.890
SD35IP	173.90	797.661	.659	.682	.890
SD36EC	173.69	814.285	.447	.571	.892
SD37FO	174.75	858.691	-.096	.361	.899
SD38ER	175.38	820.758	.401	.375	.893
SD39EC	173.80	812.552	.431	.436	.893
SD40ER	174.42	798.569	.590	.576	.890
SD41IP	173.61	844.659	.089	.368	.897
SD42EC	174.02	819.040	.352	.462	.894
SD43IP	174.12	828.817	.262	.514	.895
SD44FO	174.36	813.548	.386	.398	.893
SD45FO	175.50	841.015	.118	.364	.897
SD46FO	175.78	828.875	.256	.364	.895

Table 4.17: Authentic and Hubristic Pride item-total statistics

	Mean	Std. Deviation	N
PA1	3.99	.902	231
PA2	4.05	.866	231
PH3	2.13	1.110	231
PH4	2.77	1.127	231
PA5	3.99	.971	231
PH6	2.53	1.240	231
PA7	3.82	.915	231
PH8	2.62	1.139	231
PA9	4.01	.897	231
PA10	4.19	.886	231
PH11	2.53	1.186	231
PH12	1.86	1.096	231
PH13	1.75	.980	231
PA14	4.07	.944	231

Table 4.18: Authentic and Hubristic Pride item-total statistics

	Scale Mean if Item Deleted	Scale Variance if Item Deleted	Corrected Item-Total Correlation	Cronbach's Alpha if Item Deleted
PA1	40.30	55.840	.515	.813
PA2	40.24	56.917	.453	.817
PH3	42.16	54.818	.459	.817
PH4	41.52	54.036	.500	.813
PA5	40.30	55.758	.475	.815
PH6	41.76	53.280	.485	.815
PA7	40.47	56.905	.424	.819
PH8	41.67	52.285	.607	.805
PA9	40.28	58.142	.339	.824
PA10	40.11	58.170	.342	.824
PH11	41.76	53.500	.500	.814
PH12	42.43	55.431	.426	.819
PH13	42.54	57.852	.320	.825
PA14	40.22	54.845	.562	.810

Table 4.28: Gender differences: Ranks

	Sex	N	Mean Rank	Sum of Ranks
Meaningfulness	Male	119	117.56	13990.00
	Female	130	131.81	17135.00
	Total	249		
Satisfaction	Male	124	119.09	14767.00
	Female	133	138.24	18386.00
	Total	257		
Quality of Alternatives	Male	124	134.23	16645.00
	Female	130	121.08	15740.00
	Total	254		
Investment Size	Male	125	118.76	14845.50
	Female	132	138.69	18307.50
	Total	257		
Commitment Level	Male	123	122.74	15097.00
	Female	134	134.75	18056.00
	Total	257		
Emotional Reactivity	Male	121	135.15	16353.50
	Female	127	114.35	14522.50
	Total	248		
Emotional Cutoff	Male	118	116.57	13755.00
	Female	126	128.06	16135.00
	Total	244		
I-position	Male	123	138.15	16993.00
	Female	129	115.39	14885.00
	Total	252		
Authentic Pride	Male	119	116.17	13824.50
	Female	121	124.76	15095.50
	Total	240		
Hubristic Pride	Male	119	143.23	17044.50
	Female	127	105.01	13336.50
	Total	246		

Table 4.30: Age group differences: Ranks

	Age group	N	Mean Rank
Meaningfulness	1.00	54	125.98
	2.00	93	124.26
	3.00	94	114.91
	Total	241	
Satisfaction	1.00	56	126.33
	2.00	95	133.96
	3.00	97	114.18
	Total	248	
Quality of Alternatives	1.00	54	127.84
	2.00	97	117.54
	3.00	95	127.12
	Total	246	
Investment Size	1.00	56	128.60
	2.00	96	128.56
	3.00	96	118.05
	Total	248	
Commitment Level	1.00	56	131.97
	2.00	96	120.86
	3.00	97	125.07
	Total	249	
Emotional Reactivity	1.00	55	137.75
	2.00	95	122.29
	3.00	92	110.96
	Total	242	
Emotional Cutoff	1.00	53	112.14
	2.00	95	126.03
	3.00	88	114.20
	Total	236	
I-position	1.00	55	132.15
	2.00	96	116.68
	3.00	93	122.80
	Total	244	
Authentic Pride	1.00	50	123.76
	2.00	92	123.29
	3.00	89	104.11
	Total	231	
Hubristic Pride	1.00	56	121.54
	2.00	93	120.18
	3.00	89	117.50
	Total	238	

Table 4.32: Home Language: Ranks

	Home Language	N	Mean Rank	Sum of Ranks
Meaningfulness	Afrikaans	118	103.34	12194.00
	English	82	96.41	7906.00
	Total	200		
Satisfaction	Afrikaans	122	101.14	12339.50
	English	82	104.52	8570.50
	Total	204		
Quality of Alternatives	Afrikaans	120	99.21	11905.50
	English	81	103.65	8395.50
	Total	201		
Investment Size	Afrikaans	122	99.13	12094.00
	English	81	106.32	8612.00
	Total	203		
Commitment Level	Afrikaans	123	97.95	12047.50
	English	81	109.41	8862.50
	Total	204		
Emotional Reactivity	Afrikaans	119	98.22	11688.50
	English	80	102.64	8211.50
	Total	199		
Emotional Cutoff	Afrikaans	117	90.12	10544.00
	English	77	108.71	8371.00
	Total	194		
I-position	Afrikaans	123	99.18	12199.50
	English	79	105.11	8303.50
	Total	202		
Authentic Pride	Afrikaans	117	99.29	11617.50
	English	76	93.47	7103.50
	Total	193		
Hubristic Pride	Afrikaans	116	113.23	13135.00
	English	78	74.10	5780.00
	Total	194		

Table 4.34: Place of residence: Ranks

	Residence/Commune	N	Mean Rank	Sum of Ranks
Meaningfulness	Yes	116	126.63	14688.50
	No	133	123.58	16436.50
	Total	249		
Satisfaction	Yes	120	127.65	15317.50
	No	137	130.19	17835.50
	Total	257		
Quality of Alternatives	Yes	119	129.87	15454.00
	No	135	125.41	16931.00
	Total	254		
Investment Size	Yes	121	126.11	15259.00
	No	136	131.57	17894.00
	Total	257		
Commitment Level	Yes	120	123.82	14858.00
	No	137	133.54	18295.00
	Total	257		
Emotional Reactivity	Yes	118	127.86	15088.00
	No	130	121.45	15788.00
	Total	248		
Emotional Cutoff	Yes	117	114.92	13446.00
	No	127	129.48	16444.00
	Total	244		
I-position	Yes	118	132.90	15682.50
	No	134	120.86	16195.50
	Total	252		
Authentic Pride	Yes	114	127.28	14510.00
	No	126	114.37	14410.00
	Total	240		
Hubristic Pride	Yes	117	124.55	14572.00
	No	129	122.55	15809.00
	Total	246		

Table 4.36: Preparedness for university studies: Ranks

	Preparation	N	Mean Rank	Sum of Ranks
Meaningfulness	Yes	215	129.70	27885.00
	No	34	95.29	3240.00
	Total	249		
Satisfaction	Yes	223	135.58	30234.00
	No	34	85.85	2919.00
	Total	257		
Quality of Alternatives	Yes	220	125.08	27517.00
	No	34	143.18	4868.00
	Total	254		
Investment Size	Yes	222	132.00	29305.00
	No	35	109.94	3848.00
	Total	257		
Commitment Level	Yes	222	132.87	29497.50
	No	35	104.44	3655.50
	Total	257		
Emotional Reactivity	Yes	213	127.49	27155.00
	No	35	106.31	3721.00
	Total	248		
Emotional Cutoff	Yes	210	126.99	26667.50
	No	34	94.78	3222.50
	Total	244		
I-position	Yes	218	129.67	28268.50
	No	34	106.16	3609.50
	Total	252		
Authentic Pride	Yes	206	127.55	26274.50
	No	34	77.81	2645.50
	Total	240		
Hubristic Pride	Yes	212	122.36	25940.50
	No	34	130.60	4440.50
	Total	246		

Table 4.38: Study management: Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum
Meaningfulness	249	4.5415	.86396	1.56	6.00
Satisfaction	257	4.9835	.72893	1.63	6.00
Quality of Alternatives	254	2.7343	1.12013	1.00	6.00
Investment	257	4.8521	.81754	2.20	6.00
Commitment Level	257	5.6568	.57449	1.00	6.00
Emotional reactivity	248	3.6891	.99768	1.27	5.91
Emotional cut-off	244	4.1865	.94958	1.33	6.00
I-position	252	4.2927	.72965	2.27	6.00
Authentic Pride	240	4.0214	.66437	1.00	5.00
Hubristic Pride	246	2.3284	.80240	1.00	5.00
Manage studies	259	1.26	.43900	1.00	2.00

Table 4.40: Learning goals: Ranks

	Learning goals	N	Mean Rank	Sum of Ranks
Meaningfulness	Yes	209	129.11	26985.00
	No	40	103.50	4140.00
	Total	249		
Satisfaction	Yes	215	136.55	29358.50
	No	42	90.35	3794.50
	Total	257		
Quality of Alternatives	Yes	213	119.96	25552.00
	No	41	166.66	6833.00
	Total	254		
Investment Size	Yes	216	136.05	29386.50
	No	41	91.87	3766.50
	Total	257		
Commitment Level	Yes	215	133.42	28685.00
	No	42	106.38	4468.00
	Total	257		
Emotional Reactivity	Yes	206	122.48	25231.00
	No	42	134.40	5645.00
	Total	248		
Emotional Cutoff	Yes	205	120.05	24611.00
	No	39	135.36	5279.00
	Total	244		
I-position	Yes	210	126.37	26538.50
	No	42	127.13	5339.50
	Total	252		
Authentic Pride	Yes	199	122.58	24392.50
	No	41	110.43	4527.50
	Total	240		
Hubristic Pride	Yes	206	122.86	25309.00
	No	40	126.80	5072.00
	Total	246		

Table 4.42: Satisfaction with study course: Ranks

	Satisfied	N	Mean Rank	Sum of Ranks
Meaningfulness	Yes	225	129.34	29100.50
	No	23	77.20	1775.50
	Total	248		
Satisfaction	Yes	233	135.45	31559.50
	No	23	58.11	1336.50
	Total	256		
Quality of Alternatives	Yes	231	124.99	28873.50
	No	22	148.07	3257.50
	Total	253		
Investment Size	Yes	233	133.08	31007.50
	No	23	82.11	1888.50
	Total	256		
Commitment Level	Yes	233	131.93	30740.00
	No	23	93.74	2156.00
	Total	256		
Emotional Reactivity	Yes	225	126.06	28363.00
	No	22	102.95	2265.00
	Total	247		
Emotional Cutoff	Yes	221	121.93	26945.50
	No	22	122.75	2700.50
	Total	243		
I-position	Yes	229	128.57	29442.00
	No	22	99.27	2184.00
	Total	251		
Authentic Pride	Yes	218	123.72	26971.50
	No	21	81.36	1708.50
	Total	239		
Hubristic Pride	Yes	222	126.15	28005.50
	No	23	92.59	2129.50
	Total	245		

Table 4.44: Life goals: Ranks

	Life goals	N	Mean Rank	Sum of Ranks
Meaningfulness	Yes	236	127.75	30149.00
	No	13	75.08	976.00
	Total	249		
Satisfaction	Yes	244	130.81	31918.00
	No	13	95.00	1235.00
	Total	257		
Quality of Alternatives	Yes	241	125.02	30131.00
	No	13	173.38	2254.00
	Total	254		
Investment Size	Yes	244	130.09	31742.00
	No	13	108.54	1411.00
	Total	257		
Commitment Level	Yes	245	131.74	32276.50
	No	12	73.04	876.50
	Total	257		
Emotional Reactivity	Yes	235	124.34	29220.50
	No	13	127.35	1655.50
	Total	248		
Emotional Cutoff	Yes	232	122.92	28516.50
	No	12	114.46	1373.50
	Total	244		
I-position	Yes	239	126.83	30313.00
	No	13	120.38	1565.00
	Total	252		
Authentic Pride	Yes	229	121.51	27826.00
	No	11	99.45	1094.00
	Total	240		
Hubristic Pride	Yes	233	124.00	28892.00
	No	13	114.54	1489.00
	Total	246		

Table 4.46: Social networking: Ranks

		N	Mean Rank	Sum of Ranks
Meaningfulness	Yes	237	124.77	29570.50
	No	12	129.54	1554.50
	Total	249		
Satisfaction	Yes	244	128.90	31452.50
	No	13	130.81	1700.50
	Total	257		
Quality of Alternatives	Yes	241	129.02	31093.50
	No	13	99.35	1291.50
	Total	254		
Investment Size	Yes	244	128.96	31467.00
	No	13	129.69	1686.00
	Total	257		
Commitment Level	Yes	245	128.88	31575.50
	No	12	131.46	1577.50
	Total	257		
Emotional Reactivity	Yes	236	125.33	29579.00
	No	12	108.08	1297.00
	Total	248		
Emotional Cutoff	Yes	233	123.94	28878.00
	No	11	92.00	1012.00
	Total	244		
I-position	Yes	240	127.37	30568.50
	No	12	109.13	1309.50
	Total	252		
Authentic Pride	Yes	227	121.51	27582.50
	No	13	102.88	1337.50
	Total	240		
Hubristic Pride	Yes	234	122.43	28649.50
	No	12	144.29	1731.50
	Total	246		

Table 4.48: Study time: Ranks

	Study time	N	Mean Rank
Meaningfulness	0 - 60 minutes	53	111.95
	60 - 120 minutes	96	112.67
	120 minutes or more	90	132.56
	Total	239	
Satisfaction	0 - 60 minutes	53	115.09
	60 - 120 minutes	100	118.87
	120 minutes or more	95	135.68
	Total	248	
Quality of Alternatives	0 - 60 minutes	54	136.63
	60 - 120 minutes	98	124.88
	120 minutes or more	92	111.67
	Total	244	
Investment Size	0 - 60 minutes	54	102.13
	60 - 120 minutes	99	100.64
	120 minutes or more	94	161.17
	Total	247	
Commitment Level	0 - 60 minutes	54	117.18
	60 - 120 minutes	98	113.13
	120 minutes or more	95	139.09
	Total	247	
Emotional Reactivity	0 - 60 minutes	51	127.25
	60 - 120 minutes	95	119.51
	120 minutes or more	92	115.20
	Total	238	
Emotional Cutoff	0 - 60 minutes	50	122.84
	60 - 120 minutes	93	113.09
	120 minutes or more	91	119.07
	Total	234	
I-position	0 - 60 minutes	52	121.76
	60 - 120 minutes	97	119.65
	120 minutes or more	93	123.28
	Total	242	
Authentic Pride	0 - 60 minutes	51	108.92
	60 - 120 minutes	95	111.06
	120 minutes or more	84	124.52
	Total	230	
Hubristic Pride	0 - 60 minutes	50	113.49
	60 - 120 minutes	96	120.48
	120 minutes or more	91	120.47
	Total	237	

Table 4.50: Part-time job: Ranks

		N	Mean Rank	Sum of Ranks
Meaningfulness	Yes	59	130.80	7717.00
	No	190	123.20	23408.00
	Total	249		
Satisfaction	Yes	60	132.48	7948.50
	No	197	127.94	25204.50
	Total	257		
Quality of Alternatives	Yes	60	124.90	7494.00
	No	194	128.30	24891.00
	Total	254		
Investment Size	Yes	60	119.30	7158.00
	No	197	131.95	25995.00
	Total	257		
Commitment Level	Yes	59	135.11	7971.50
	No	198	127.18	25181.50
	Total	257		
Emotional Reactivity	Yes	56	128.12	7174.50
	No	192	123.45	23701.50
	Total	248		
Emotional Cutoff	Yes	54	123.54	6671.00
	No	190	122.21	23219.00
	Total	244		
I-position	Yes	59	130.17	7680.00
	No	193	125.38	24198.00
	Total	252		
Authentic Pride	Yes	57	126.15	7190.50
	No	183	118.74	21729.50
	Total	240		
Hubristic Pride	Yes	55	127.67	7022.00
	No	191	122.30	23359.00
	Total	246		

Table 4.52: Family support: Ranks

		N	Mean Rank	Sum of Ranks
Meaningfulness	Yes	236	124.34	29343.50
	No	13	137.04	1781.50
	Total	249		
Satisfaction	Yes	243	129.39	31442.50
	No	14	122.18	1710.50
	Total	257		
Quality of Alternatives	Yes	240	127.07	30496.00
	No	14	134.93	1889.00
	Total	254		
Investment Size	Yes	243	130.12	31619.00
	No	14	109.57	1534.00
	Total	257		
Commitment Level	Yes	244	127.80	31182.50
	No	13	151.58	1970.50
	Total	257		
Emotional Reactivity	Yes	235	125.28	29440.00
	No	13	110.46	1436.00
	Total	248		
Emotional Cutoff	Yes	232	125.95	29221.50
	No	12	55.71	668.50
	Total	244		
I-position	Yes	239	127.85	30556.50
	No	13	101.65	1321.50
	Total	252		
Authentic Pride	Yes	226	120.33	27194.50
	No	14	123.25	1725.50
	Total	240		
Hubristic Pride	Yes	233	120.67	28115.50
	No	13	174.27	2265.50
	Total	246		

ANNEXURE E

Figure 4.5

