

**FACTORS AND EXPERIENCES RELATED TO THE ACADEMIC SUCCESS OF
STUDENTS IN THE FACULTY OF THE HUMANITIES**

Submitted by

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Declaration

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Abstract

This research study builds on the current body of research regarding the predictors of academic success among students enrolled in higher education (HE), as well as students' perceptions of these factors. The aim of the study is to contribute to the understanding of the factors and experiences related to academic success in HE and to expand on the model of academic success within the South African (SA) context. The study focussed specifically on first- to fifth-year students enrolled in the Faculty of the Humanities at the University of the Free State. The roles of several pre-enrolment and post-enrolment factors on students' academic success were explored by means of this mixed-methods study. Pre-enrolment factors that were examined during the study included students' age, gender, race, language proficiency, Grade 12 performance, high school attended, and parental levels of education, while the post-enrolment factors that were scrutinised included students' initial educational goals, initial commitment to the HE institution, physical energy devoted to HE activities, psychological energy devoted to HE activities, academic self-concept, participation in academic activities, academic contact with staff, academic contact with peers, participation in extracurricular activities, non-academic contact with staff, non-academic contact with peers, financial responsibilities, family responsibilities, and employment responsibilities. The quantitative analysis was based on the data collected from 229 students, while the qualitative data were collected from 26 students, all of whom were in their first to fifth years in the Faculty of the Humanities.

Results of the quantitative section of the study showed that several differences existed in terms of students' age, race, gender, language proficiency, high school attended, as well as parental levels of education and the various post-enrolment factors that were explored. Moreover, the total set of pre- and post-enrolment factors, as well as the separate sets of pre-enrolment factors and post-enrolment factors explained a significant amount of the variance in academic success for the entire sample, as well as for the different race groups (designated group and the white group). Next, different individual variables explained a significant amount of the variance in academic success in the designated group and white group. In terms of the qualitative section of the study, students' perceptions of academic success included how they viewed academic success, how they would define an academically successful student and the behaviours that successful students would exhibit. Lastly, the individuals who played an important role in success and other aspects that they viewed as important in

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academic success were highlighted in the qualitative section. When results of the two sections of the study were integrated, it was clear that the prediction of academic success remains very complex and that several pre- and post-enrolment factors in combination, rather than factors in isolation, are more successful in the prediction of students' academic success. This study contributed significantly to the body of research regarding academic success within the South African context, specifically with regards to the academic success of non-traditional students.

Keywords: academic success, higher education, student perceptions, pre-enrolment factors, post-enrolment factors

Opsomming

Hierdie navorsingstudie bou op die bestaande kennis rakende die voorspellers van akademiese sukses onder studente in hoër onderwys, sowel as studente se persepsies van hierdie faktore. Die doel van die studie is om by te dra tot die kennis rakende die faktore en ervarings wat betrekking het tot die akademiese sukses van studente in hoër onderwys asook om uit te brei op die bestaande model van akademiese sukses binne die Suid-Afrikaanse konteks. Hierdie studie het spesifiek op eerste- tot vyfdejaarstudente in die Fakulteit Geesteswetenskappe aan die Universiteit van die Vrystaat gefokus. Die rol van verskeie preregistrasiefaktore en postregistrasiefaktore is tydens hierdie studie ondersoek. Preregistrasiefaktore wat ondersoek is, sluit studente se ouderdom, geslag, ras, taalvaardigheid, Graad 12-prestasie, tipe hoërskool wat bygewoon is, sowel as ouers se vlakke van opleiding in, terwyl die post-registrasie faktore wat ondersoek is, studente se aanvanklike akademiese doelwitte, aanvanklike toewyding tot die hoëronderwysinstansie, fisiese energie wat aan akademiese aktiwiteite gewy word, sielkundige energie wat aan akademiese aktiwiteite gewy word, akademiese selfkonsep, deelname aan akademiese aktiwiteite, akademiese kontak met personeel, akademiese kontak met die portuurgroep, deelname aan buitemuurse aktiwiteite, nie-akademiese kontak met personeel, nie-akademiese kontak met die portuurgroep, finansiële verantwoordelikhede, familie verantwoordelikhede, en beroepsverantwoordelikhede insluit. Die kwantitatiewe analises is gebaseer op data wat van 229 studente ingesamel is, terwyl die kwalitatiewe data van 26 studente ingesamel is, waarvan almal in hul eerste tot vyfde jaar in die Fakulteit Geesteswetenskappe was.

Resultate van die kwantitatiewe gedeelte van die studie het getoon dat verskeie verskille bestaan in terme van studente se ouderdom, geslag, ras, taalvaardigheid, tipe hoërskool wat bygewoon is, sowel as ouers se vlakke van opvoeding en die verskillende post-registrasiefaktore wat ondersoek is. Verder het die hele stel van pre- en postregistrasiefaktore sowel as die aparte stelle van preregistrasiefaktore en postregistrasiefaktore onderskeidelik 'n beduidende gedeelte van die variansie van die akademiese sukses van die hele steekproef, sowel as dié van die verskillende rasse-groepe (aangewysde groep en wit groep), verduidelik. Laastens het verskillende individuele veranderlikes 'n beduidende gedeelte van die variansie van die akademiese sukses van die hele groep en verskillende rasse-groepe verduidelik. In terme van die kwalitatiewe gedeelte van die studie was studente se persepsies van akademiese sukses gefokus op hoe hulle akademiese sukses definieer, hoe hulle 'n akademies suksesvolle

student definieer, asook die gedrag wat 'n suksesvolle student sal vertoon. Laastens is die individue wat 'n rol in studente se sukses speel sowel as ander aspekte wat moontlik 'n rol in akademiese sukses speel, deur die kwalitatiewe gedeelte van die studie aangetoon. Nadat die resultate van die twee gedeeltes van die studie geïntegreer is, was dit duidelik dat die voorspelling van akademiese sukses steeds baie kompleks is en dat verskeie pre- en postregistrasiefaktore in kombinasie, eerder as individuele faktore in isolasie, meer suksesvol in die voorspelling van akademiese sukses is. Hierdie studie dra by tot die bestaande kennis ten opsigte van akademiese sukses in die Suid-Afrikaanse konteks, met 'n spesifieke fokus op nie-tradisionele studente.

Sleuteltermes: akademiese sukses, hoër onderwys, studente se persepsies, preregistrasiefaktore, postregistrasiefaktore

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List of Acronyms

AFS	Academic Facilitation Sessions
AFT	American Federation of Teachers
ANOVA	One-way analysis of variance
AP	Admission point
ASCS	Academic self-concept scale
BICS	Basic interpersonal communication skills
CALP	Cognitive academic language proficiency
CHE	Council on Higher Education
DHET	Department of Higher Education and Training
DOE	Department of Education
FET	Further Education and Training
HE	Higher education
IC1	Initial commitment to the institution
IC2	Future levels of commitment to the institution
IQ	Intelligence Quotient
MANOVA	Multivariate analyses of variance
NATP	New Academic Tutorial Programme
NBT	National Benchmark Tests
NPHE	National Plan for Higher Education
NQF	National Qualifications Framework
NSC	National Senior Certificate
OBE	Outcomes-based education
OECD	Organisation for Economic Co-operation and Development

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SA	South Africa
SAQA	South African Qualifications Authority
SASSE	South African Survey of Student Engagement
SRA	Social Research Association
UFS	University of the Free State
UK	United Kingdom
USA	United States of America

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Chapter 1: Context of the Study

“We, your children, are faced with a tremendous difficulty in terms of completion of our studies and consequently obtaining our qualifications. We are frustrated, vulnerable, emotional and injured – please intervene ...” (Badat, 2016, p. 10).

This #FeesMustFall statement from students demonstrates the astounding challenges that students in higher education (HE) in South Africa (SA) are facing currently. The past two years (2015-2016) witnessed a crisis in HE in SA with the #FeesMustFall movement highlighting the inaccessibility of HE for many aspiring students and the many challenges with which students must contend. Furthermore, many of the students that do manage to enter South African HE institutions are underprepared for the HE context, which compounds the problem of inadequate funding by inflicting a burden on the already extended academic and support resources. Therefore, many students are struggling to succeed in demanding academic programmes with little or no resources, while also working to manage financially, ultimately resulting in academic failure.

The issue of student success, persistence, and the completion of their qualifications has risen to the forefront of the national dialogue on higher education (HE) in SA (Young, 2016). However, despite the high interest from various sectors in the academic success of students and the multiple definitions and conceptualisations of the construct, no clear answers with regard to student success have been found. Consequently, it is essential for HE institutions and researchers to investigate how to triumph over the student success problem. Existing barriers to success and the persevering patterns of underperformance are not likely to change without intervention, and an undeniable need for research to identify the factors conducive to success remains (Mentz, 2012; Young, 2016). Therefore, the aim of this study was to examine and gain insight into the factors and experiences related to academic success among students in HE, as well as to expand on the existing model of academic success within the SA context. The focus of the study was on academic success from a student perspective and not an institutional perspective.

This chapter describes the higher educational climate with regard to international and South African trends. Furthermore, since the population of this study was limited to students from the University of the Free State (UFS), the educational context at this institution was also explored, with a specific focus on the Faculty of the Humanities at the UFS. The

rationale for the study is discussed briefly, where after the theoretical perspectives that underpin the study are explored. Next, an overview of the research design and methods is given, and lastly, the chapters that form part of the study are delineated.

1.1 Context of and Rationale for the Research Study

As stated above, this section focuses on the HE context. Firstly, trends, changes and developments in the international HE context are discussed. Next, the history and current situation in the South African HE milieu are examined, and lastly, the situation at the UFS and the Faculty of the Humanities at this institution is explained briefly.

1.1.1 The international HE context. The academic success of students in HE still remains a critical point of discussion worldwide, and HE institutions are under increasing pressure to find solutions that will aid in the facilitation of student success (Berge & Huang, 2004; Jobe, Spencer, Hinkle, & Kaplan, 2016). In the United States of America (USA), HE institutions have been facing challenges regarding student retention since the 1980s, especially with regard to students from minority groups. Similarly, in the United Kingdom (UK), the HE system is facing difficulties regarding increasing numbers of students enrolling in HE, more diverse student bodies, and low success rates of students. In Australia, the focus has shifted from elite education for small groups to delivering education and training of a high quality to the masses (Jama, Mapesela, & Beylefeld, 2008; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2006; McKenzie & Schweitzer, 2001).

The massification of HE on an international level has led to a more diverse student body that poses many new challenges for HE systems (Altbach, Reisberg, & Rumbley, 2009). An alarming finding on an international level is the large discrepancy in the success rates of especially diverse demographic groups of students (Bowen, Chingos, & McPherson, 2009; Carey, 2008). According to the Organisation for Economic Co-operation and Development (OECD) (2008), it is unlikely that the situation of increasing student numbers, diverse student populations, and poor student performance will change in the foreseeable future; therefore, it is critically important to investigate factors affecting student success. Trowler (2010) agrees that, because HE institutions are facing economic circumstances that are more strained and are under more pressure to attract and retain diverse students, understanding student success continues to be of crucial importance internationally.

1.1.2 The South African HE context. The South African HE system faces even more challenges than those described above due to the various changes in the educational system since 1994 (Council on Higher Education (CHE), 2016; Department of Education (DOE), 1998; De Wet & Wolhuter, 2009; Fraser & Killen, 2003; Jaffer, Ng'ambi, & Czerniewich, 2007; Van Zyl, 2013). Similar to the school system before 1994, HE under the Apartheid regime was designed to maintain the social, political, and educational advantage of white students through an educational system of higher quality, while limiting access to quality learning for students of colour (Boughey, 2004; CHE, 2004, 2016; Gbadamosi & De Jager, 2009; Lange, 2006; Letseka & Maile, 2008; Steyn, Harris, & Hartell, 2014). Participation rates of students of colour in HE were low and did not reflect the demography of the country, and it did not contribute to the skills development needed for sustained growth in SA (Lange, 2006). Although white HE institutions did allow students of colour to enrol according to the Amendment Act no. 83 of 1983 (Agar, 1990), HE institutions truly started to integrate students from a wide range of social and cultural backgrounds with different expectations, needs, and academic competencies only after 1994 (OECD, 2008).

After 1994, the major focus in HE in SA was on increasing the number of student enrolments from previously disadvantaged backgrounds. Unfortunately, increased enrolments did not translate into success and retention (Cloete et al., 2002). According to the DOE (2005, 2008), since 1996, students' retention rates decreased, while dropout rates increased. Basson (2006) and Jama et al. (2008) were of the opinion that growing numbers of students were enrolling in HE institutions without the basic academic skills and knowledge (e.g., critical thinking, time-management skills, and organisational skills) that are needed to achieve success.

Consequently, the DOE made several substantial changes to the Further Education and Training (FET) programme (previously the Grade 10 to 12 curriculum), which focussed on providing learners with the skills and knowledge necessary to achieve success in different educational and/or occupational contexts (DOE, 1998; Potgieter, Davidowitz, & Mathabatha, 2008). Despite the changes to the FET programme, students remained unable to achieve academic success in the HE context. According to a parliamentary portfolio committee meeting of the DOE in June 2008, several aspects still raised concern. The first concern was the fact that, regardless of their efforts, the school system in SA remained unable to deliver students that were adequately prepared for the challenges of HE. Secondly, throughput rates were a matter of concern. Less than a third of students enrolled in HE in SA were able to

complete their qualifications within the expected time frames, and only seven of the 23 HE institutions in SA achieved acceptable graduation rates among their students. Badat (2007), as well as Letseka and Maile (2008), added that the graduation rate of 15% in SA was the lowest in the world. This number was of even greater concern when the shortage of skills and knowledge in the labour market was taken into account. Despite these concerns, some improvements were highlighted during this meeting. Firstly, students from all race groups finally had equal access to HE. Furthermore, an improvement could be seen in terms of the equality of success rates of students, with 72% of black students, 76% of coloured students, 79% of Indian students and 85% of white students achieving success on an undergraduate level in 2006 (see figure 1). Furthermore, all HE institutions had implemented student support initiatives that offered support to especially students with specific challenges (DOE, 2008; Department of Higher Education and Training (DHET), 2014a, 2016; Scott, 2009).

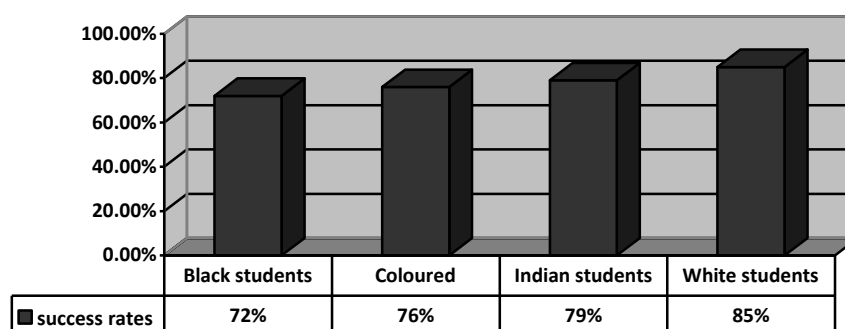


Figure 1. Student success rates: 2006. Adapted from DHET (2016) and Scott (2009).

More recently, the CHE (2016) appointed a task team to evaluate the progress that the HE system in SA had achieved in the 20 years since the end of the Apartheid era in 1994. The task team found that the demographics of students enrolled in HE had seen dramatic changes in the last 20 years, specifically with regard to increased access for previously disadvantaged students. Student bodies at HE institutions in SA now consist of a majority of black students, although the participation rates (the total student enrolment expressed as a percentage of the 20- to 24-year-old age group in the population) for black and white students are still significantly different, with a 55% participation rate for white students and a 16% participation rate for black students. Moreover, the national participation rate has increased only slightly from 17% in 1996 to 19% in 2013, while the population of SA has increased from 40.5 million to almost 52 million during the same period. These low participation rates

affect social and economic development negatively and are a key factor in the shortage of high-level skills in SA. Furthermore, presently, black African and female students still have limited access to high-status, scarce-skill, and postgraduate programmes, while black African students remain enrolled in the Humanities and Social Sciences to a great extent. This reveals that the South African HE system have not yet fully changed the pre-1994 enrolment patterns (DHET, 2016; Scott, Yeld, & Hendry, 2007). Similar to the findings of the reports above, students' success rates remain significantly skewed by race, and the educational system in SA remains a low-participation system with high attrition rates (CHE, 2009, 2014; Grussendorff, Liebenberg, & Houston, 2004; Scott et al., 2007; Van Schalkwyk, 2007).

In order to lower dropout rates among students, the CHE (2016) as well as Olani (2009) pointed towards the importance of identifying factors that could be used by HE institutions to identify students with a higher risk to drop out. The prediction of academic success is of crucial importance to South African HE institutions, the government, students, and their parents. Since the 1960s, several studies have been conducted in SA to identify the factors that play a role in academic success. However, even after renewed efforts in the field (after students of all races and backgrounds were allowed to enrol in HE in the 1990s), no clear answer has been reached (CHE, 2016; Dixon & Durrheim, 2003; Mentz, 2012; Van Dyk & Weideman, 2004). This study aimed to contribute to the body of knowledge regarding factors that play a role in academic success in the diverse student body currently enrolled at South African HE institutions.

1.1.3 Academic success at the University of the Free State (UFS) and the Faculty of the Humanities. According to Pitkethly and Prosser (2001), HE campuses around the world function differently; therefore, it is necessary to understand the unique climate, history, and needs of the specific population under investigation. Similar to other HE institutions in SA, the UFS has undergone several changes since its inception more than 100 years ago (Wilkinson, 2002). As stated in its integrated report, the UFS (2014) moved from being a small English-medium college in the 1900s, to being a small Afrikaans-medium university in the 1950s, to being a medium-sized parallel language HE institution across three campuses during the early 2000s until currently. Moreover, the student body changed from being entirely white to having a majority of black students. Additionally, the UFS also has to contend with other complexities. Firstly, it is situated in a mainly rural province where poverty and illiteracy has a negative effect on the potential of prospective students. It was found that up to 10% of students enrolled at the UFS do not have the means to afford their

most basic needs. Furthermore, the UFS is some distance away from the major economic centres of Johannesburg and Cape Town and has to rely on a comparatively small fiscal base from which to serve the needs of its students (UFS, 2012). These aspects pose several challenges in terms of students' success and throughput rates.

During his inaugural speech, Prof. Jansen (2009), former vice-chancellor of the UFS, made it clear that the improvement of success rates at the UFS is critically important. He also stated that the UFS would focus specifically on attracting students of a high quality as part of his aim to improve student success. Jansen (2010) further declared that the entry requirements of the UFS would be revised and that higher Grade 12 marks would be expected from prospective students in order to improve the quality of students enrolled at the UFS. Furthermore, since 2012, the UFS actively began to address the overall low rates of success among students as well as the disparity in the academic success rates between students of different racial and socio-economic backgrounds enrolled at the UFS (UFS, 2014). This was done by focusing on two areas of student development, namely the "Academic Project" (academic development and support), as well as the "Human Project" (social development and support). The aim of this dual focus was to ensure that students could integrate successfully into the UFS on academic and social levels. Lastly, the UFS also set in place support services to aid students with specific needs (e.g., first-generation students and students from low socio-economic backgrounds) in achieving success (UFS, 2012). The subsequent success rates for undergraduate students in 2013 are set out in Table 1.

From the table, it is evident that only three of the faculties of the UFS (Health Sciences, Natural and Agricultural Sciences, and Theology) have achieved success rates of 80% and more, as expected by the DOE (UFS, 2008, 2013). Additionally, although progress has been slow, the Integrated Report (2014) showed that the UFS had seen a 4.04% increase in the success rates of black students and a 1.64% increase in success rates of white students between 2013 and 2014 (UFS, 2014).

Table 1

Total Undergraduate Success Rates at the UFS in 2013

Faculty	Black	Coloured	Indian	White	Total
Economic and Management Sciences	70.24%	71.98%	70.17%	82.76%	73.42%
Education	77.82%	73.76%	81.36%	85.75%	79.56%
Health Sciences	84.19%	88.32%	92.33%	96.73%	91.98%
Humanities	71.92%	71.95%	78.66%	83.07%	73.83%
Law	63.37%	66.49%	59.57%	73.67%	66.66%
Natural and Agricultural Sciences	75.06%	82.18%	78.72%	89.29%	80.48%
Theology	72.13%	84.20%	100.00%	88.98%	85.72%
Total	73.46%	73.23%	72.72%	86.58%	77.17%

Note. Adapted from www.ac.za/docs/default-source/annual-report-to-the-minister-of-education-2013-2537.pdf?sfvrsn=6. Copyright 2013 by the University of the Free State. Reprinted with permission.

The Faculty of the Humanities is the largest faculty at the UFS and offers a range of programmes in the areas of language, cultural studies, and social sciences, with the highest student enrolments in the B.A. General and B.Soc.Sc. programmes. Despite the efforts to improve student success rates described above, success rates in the Faculty of the Humanities remain below the DOE's expected 80%. In an attempt to continue to improve the success rates while still maintaining high access rates, the Faculty of the Humanities has implemented several support programmes since 2009, including the New Academic Tutorial Programme (NATP) and academic facilitation sessions (AFS), aimed at providing support to students and enabling them to achieve success (UFS, 2008, 2011). However, despite the strong emphasis and several efforts to improve the success and throughput rates of students at the UFS and the Faculty of the Humanities, this remains an area of concern (UFS, 2008, 2013, 2014).

Considering the arguments above and the fact that student success rates remain low despite various efforts from HE institutions, it is evident that no clear answers regarding student success have been found on an international level or in SA. Therefore, the aim of this study was to examine the factors and experiences related to academic success, specifically among students in the Faculty of the Humanities at the UFS.

1.2 Theoretical Perspectives Underpinning the Study

The focus of the current study was on examining academic success among students and the factors that could play a role in their academic success. Therefore, it was important, firstly, to examine and understand theoretical approaches that aim to describe academic success, and secondly, to examine factors that could possibly play a role in the academic success of students.

Kuh et al. (2006) and Pascarella and Terenzini (2005) stated that although a wide spectrum of theoretical approaches to student success is available, no single theoretical model is broad and complex enough to explain student success and retention accurately. For this reason, various theoretical perspectives that describe student success from a variety of different perspectives were utilised to inform this study. The current study aimed to explore psychological, sociological, organisational, cultural, and economic approaches to student success. By considering the approaches together, the aim was that the different theories would provide a more holistic account of the diverse factors that play a role in student success (Kuh et al., 2006).

The complexity of academic success becomes evident when considering the vast number of theoretical approaches and models available on the topic and the different points of view that these approaches propose. The approaches that were utilised in this study included some of the most widely used international approaches, theories, and models specific to the SA context. Several of the international models that were utilised to inform this study focussed on the importance of students' integration in their success (Berger & Milem, 1999; Braxton, Hirschy, & McClendon, 2004; Cabrera, Castaneda, Nora, & Hengstler, 1992; Pascarella & Terenzini, 1980; Spady, 1970; Tinto, 1975). Moreover, the importance of the involvement of students in their own academic careers was highlighted by several researchers (Astin, 1984; Pascarella & Terenzini, 1980; Reason, Terenzini, & Domingo, 2005). Other approaches examined the effect of external factors on the academic success of students (Bean & Metzner, 1985; Cabrera et al., 1992) and several of the researchers also proposed that different aspects should be taken into account for non-traditional students or students with different characteristics than the factors that are important for traditional students (Bean & Metzner, 1985; Bourdieu, 1977, 1984, 1986; Braxton et al., 2004). Finally, Kuh et al. (2006) proposed a framework for student success in which they aim to integrate several of the most important perspectives that explain student success from a holistic point of view.

SA models that were explored in this study aimed to include models that examined academic success from an institutional point of view (Ogude, Kilfoil, & Du Plessis, 2012) and from an individual point of view (Jama et al., 2008; Strydom & Mentz, 2010; Wilson-Strydom, 2010). Strydom and Mentz (2010) built on the work of Kuh et al. (2006) in their student engagement model and focussed on student engagement as one of the key elements in student success in the SA context, while Wilson-Strydom (2010) focussed on the preparedness of students entering HE institutions as a valuable contributor to academic

success. Lastly, Jama et al. (2008) utilised the work of Bean and Metzner (1985), Spady (1970) and Tinto (1975) to formulate their theory for non-traditional students in SA. After examining some of the most widely used theories on academic success, the current study aimed to put forward a model of student success that is relevant to this study by integrating the information of the various theoretical models.

In addition to understanding the different theoretical approaches regarding academic success, it was important to examine and understand the factors that could play a role in predicting academic success of students. This study intended to focus on pre-enrolment factors, factors that would play a role upon entering and integrating into the HE context, and factors that would play a role in students' ongoing academic careers and integration.

With regard to the pre-enrolment factors that the researcher endeavoured to consider, various researchers pointed to the importance of students' demographic attributes such as age, gender and race in predicting their academic success (Adams & Corbett, 2010; Castro-Salazar & Bagley, 2010; Leppel, 2002; Kuh, Cruce, Shroup, & Kinzie, 2008; McKenzie & Schweitzer, 2001; Mentz, 2012). Next, students' previous academic experiences, such as Grade 12 performance, language proficiency, and the type of high school that students attended were included in this study (Considine & Zappala, 2002; Hearn, 2006; Korobova, 2012; Martinez & Klopott, 2003). The last category of pre-enrolment factors that was considered for this study was students' family background characteristics (Carlton, 2015; Carnevale & Fry, 2000).

Next, the aim was to explore several factors that are important when students' enter the HE context. These factors included students' initial educational goals and commitment to the HE institution, academic self-concept beliefs, the physical and psychological energy that students devote to their academic careers, and the degree for which students were enrolled (Astin, 1984; Dambudzo, 2009; Donahue, 2015; Leppel, 2001; Tinto, 1993).

Subsequently, the researcher intended to discuss factors that are important in students' integration with the HE context. Here, students' academic integration (time spent on academic tasks and students' academic contact with staff and peers), social integration (students' non-academic contact with staff and peers, participation in extracurricular activities, and living on or off campus), as well as external factors (financial responsibilities, family responsibilities,

and employment responsibilities) were explored (Alderman, 2008; Bojuwoye, 2002; Coates & Radloff, 2014; DeSimone, 2008; Donahue, 2015; Kuh, 2003; You, 2015).

Lastly, the aim was to examine aspects that are regarded as important during students' ongoing academic careers and integration. Here, theories on academic (intellectual) and psychological (non-intellectual) outcomes were considered. In terms of academic outcomes, students' academic and intellectual development was examined, and in terms of psychological outcomes, students' subsequent educational goals and commitment to the HE institution were highlighted (Pascarella & Terenzini, 2005; Reason, 2009; Tinto, 1975).

These sections of the study aimed to inform this research study thoroughly with regard to academic success and to gain insight into aspects and factors that could affect student success, as set out by previous research studies.

1.3 Overview of the Research Design and Methods

To reach the aim of this study, namely to understand the factors and experiences related to the academic success of students in the Faculty of the Humanities, the following research questions were posed:

Research question 1: Are there significant differences in students' academic success and post-enrolment factors with regard to various pre-enrolment factors?

Research question 2: Can a significant amount of the variance in academic success of students from designated (students from all racial backgrounds except white) and white groups be explained by various pre-enrolment and post-enrolment factors?

Research question 3: Can a significant amount of the variance in academic success of first-, second-, third-, fourth- and fifth-year students be explained by various pre-enrolment and post-enrolment factors?

Research question 4: What do students think affects their academic success?

The pre-enrolment factors that were considered included age, gender, race, language proficiency, Grade 12 performance, high school attended, and parental levels of education. The post-enrolment factors that were considered included initial educational goals, initial commitment to the HE institution, physical energy devoted to HE activities, psychological

energy devoted to HE activities, academic self-concept, participation in academic activities, academic contact with staff, academic contact with peers, non-academic contact with staff, participation in extracurricular activities, non-academic contact with peers, living arrangements, financial responsibilities, family responsibilities, and employment responsibilities.

Owing to the complexity of academic success, and to answer the research questions above adequately, a mixed-methods approach (Brannen, 2005) was utilised in the study. By making use of a mixed-methods approach, the researcher was able to draw from the strengths of both quantitative and qualitative research methods, while the weaknesses of both these methods can be minimised (Johnson & Onwuegbuzie, 2004). While quantitative methods were utilised in the examination of the first three research questions, the fourth research question was answered by making use of qualitative methods.

The population of interest in the present study was students from both genders, all race groups, and all age groups in their first to fifth years of study in the Faculty of the Humanities at the UFS. Different sampling methods were utilised to select participants for the quantitative and qualitative sections of the study. While a non-probability sampling method (Howell, 2004) was utilised in the quantitative section of the research, a purposive sampling method (Patton, 2002; Stake, 2005) was used to obtain participants during the qualitative section of the study.

Quantitative and qualitative data were collected. For the quantitative section of the study, an online battery of surveys was sent to the entire cohort of students in the Faculty of the Humanities. This battery included information regarding participants' demographic information, an academic self-concept scale, scales regarding participants' academic and non-academic contact with staff and peers, and scales to measure participants' levels of motivation and commitment to their academic goals, to name only a few. The data from the questionnaires were supplemented by additional information obtained from the UFS Student Academic Services, such as participants' language proficiency scores (where available), as well as participants' academic performance in the various modules of their degree programmes. For the qualitative section of the study, data were gathered by making use of focus groups. Only students that participated in the quantitative section of the study were included in the focus groups. The recruited students participated in one of the six focus group sessions that were conducted.

When considering the data analysis for the quantitative section, descriptive statistics were utilised for both the categorical and continuous variables measured in this study, and multivariate analyses of variance (MANOVAs) (Pallant, 2013) were used to determine whether significant differences existed between various groups on a range of different variables. Furthermore, this study used multiple regression analyses (Montgomery, Peck, & Vining, 2001) to determine the amount of variance in academic success that can be explained by a number of variables. In the qualitative section of the study, thematic analysis (Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006) was employed to identify important themes regarding students' experiences of academic success and the factors associated with it.

In terms of the ethical considerations of the study, ethical clearance to conduct this study was obtained. Furthermore, informed consent was obtained from participants for both the quantitative and qualitative sections of the study, and participants' information was treated as confidential. The researcher aimed to minimise any negative effects that participation in the study might have had on participants by firstly ensuring that participants knew what would be expected of them if they chose to participate, but also by informing participants of the support and counselling services available to them, should they need such services.

1.4 Delineation of Chapters

Chapter 1 has provided the rationale for the study, described the research questions posed in the study, and briefly outlined the methodology that was employed in conducting the research.

Next, the focus of Chapter 2 is the academic success of students in HE. Firstly, the aim of the chapter is to conceptualise and define the term *academic success*. Next, frequently used conceptualisations of academic success are discussed before a conceptualisation of academic success specific to this study is put forward. Lastly, widely used theoretical approaches that aim to describe student success are examined, where after an overarching, integrated theoretical model for this study is proposed.

In Chapter 3, the predictors of academic success, as presented in the integrated model of academic success, are discussed. Firstly, the pre-enrolment stage of the model is discussed according to demographic attributes, previous academic experiences, and family background information. Secondly, the entry into HE stage of the model is considered with specific focus on students' initial academic goals and their initial commitment to the specific HE institution.

Thirdly, the HE experience stage is examined by discussing academic integration factors, social integration factors, and external factors. Lastly, the ongoing integration stage is considered.

The focus of Chapter 4 is the methodology employed in the current research study. Firstly, the research aims, questions, and hypotheses are presented, where after the research design is examined. Moreover, the population group, sampling methods, and final sample for both the quantitative and qualitative sections of the study are discussed. This chapter also focuses on the different methods of data collection and data analysis for both the quantitative and qualitative sections of the study. Lastly, a discussion regarding issues of trustworthiness and ethical considerations concludes the chapter.

In Chapter 5, the results of this study are presented. In the quantitative section of this chapter, the descriptive and inferential statistics are discussed. In terms of the qualitative results, students' experiences of academic success and the factors they associate with academic success are presented.

Thereafter, the focus of Chapter 6 is on examining the results that were set out in the previous chapter to answer the research questions utilised in the study. The aim was to integrate the results of the quantitative and qualitative sections of the study and link the results of this study with existing research in the field of academic success.

In Chapter 7, the main research findings in this study are discussed, and recommendations for future research are made. Finally, the limitations of the current research and recommendations for future studies are presented, and a comprehensive conclusion of the research study is presented.

1.5 Chapter Summary

This chapter gave an overview of the current educational context internationally and in SA. Furthermore, the specific climate and context at the Faculty of the Humanities at the UFS were described briefly. Next, the theoretical perspectives that were utilised in this study were discussed, and a brief overview of the rationale for the study, the research design, and methods was presented. Lastly, a summary of the chapters that form part of the study was given. In Chapter 2, the term '*academic success*' is explored from various individual, institutional, and theoretical perspectives.

Chapter 2: Academic Success in Higher Education

In the previous chapter, the reader was introduced to the current higher educational context in SA. In this chapter, the focus is specifically on the concept *academic success* in HE institutions. Although research in the HE sector has focussed increasingly on student success, no consensus has been reached on what student success essentially is.

In the first section of this chapter, frequently used definitions and conceptualisations of academic success are provided to arrive at a conceptualisation specific for this study. The chapter commences with a discussion of various theoretical perspectives used to describe student academic success. In the concluding section of the chapter, an integrated theoretical model of academic success specific to this study is presented.

2.1 Conceptualising Academic Success

Given the high interest from various quarters in academic success in the HE sector, it is not surprising to find that multiple definitions and conceptualisations of the construct exist (Korobova & Starobin, 2015). Mentz (2012) states that the study of student success is complicated by two aspects: firstly, the immense number of outcomes included in student success, and secondly, the lack of uniformity in defining these outcomes.

In this section, a number of conceptualisations of academic success are described. Firstly, definitions from an institutional point of view are explored, and secondly, attention is given to conceptualisations from an individual (student) point of view. Key terms currently utilised in HE literature are identified, and finally, a definition of *academic success* as employed in the current study is provided.

2.1.1 Institutional definitions of academic success. While the focus of this study is on the individual, it is important to take note of the institutional definitions of success.

Venezia, Callan, Finney, Kirst, and Usdan (2005) state that institutions regularly use indicators of students' success such as student achievement (measured by students' marks), persistence to the next year of study, the length of time it takes to complete the degree, graduation rates, and enrolment in tertiary education.

In SA, the DOE (2001) in its National Plan for Higher Education (NPHE) identified different terms for the measurement of student success from an institutional point of view (Watson, 2008). These terms are examined briefly in the next section.

2.1.1.1 Graduation, throughput and success rates. The first term used for measuring student success is the graduation rate of students. The graduation rate is calculated by taking into account the proportion of students enrolled for a specific degree in a particular year who will graduate in that year. According to Bunting and Cloete (2004), Subotsky (2003), and Watson (2008), the value of using the graduation rate of students as an indicator of success is complicated by three factors.

Firstly, the duration of the degree is an important consideration. Hypothetically, the graduation rate for a one-year degree could be 100%, while the graduation rate for a three-year degree could be only 33,3% (because only a third of students enrolled for a three-year degree would be in their final year). Although the NPHE (DOE, 2001) recognised this factor by setting different indicators for different degrees, this is still unsatisfactory because, for example, all qualifications of three years and less are grouped together, irrespective of their duration. A second factor that influences the efficiency of graduation rates as measurement of student success is the number of occasional students in the higher educational system. These students participate in single modules for their own benefit, and will not graduate in that specific degree. Currently, occasional students are included in graduation rate calculations. The third and last influencing factor is the consistency of intake numbers of the degree. Calculations of graduation rates rely on the hypothesis that the student intake for a degree will remain constant over the duration of the degree. In practice, however, this is not always the case. When considering the three factors mentioned above, it is clear that the use of graduation rates can be highly problematic (CHE, 2009; Murray, 2014; Steyn & De Villiers, 2007; Watson, 2008).

Throughput rates can be defined roughly as the number of students that complete their degrees. The CHE (2010) stated that different HE institutions use different measures to calculate throughput rates and that it is difficult to produce a single measure of throughput. Therefore, graduation rates are used as proxy for throughput rates in the SA context. This poses several problems, because it does not allow for a true understanding of the factors associated with graduation rates (Mentz, 2012). Moreover, Letseka, Cosser, Breier, and Visser

(2010) pointed out that the use of throughput rates are problematic in SA due to limited cohort studies that track students from their first year to graduation.

The success rate of students refer to the proportion of full-time equivalent credits earned, divided by the number of full-time equivalent enrolled students. In other words, the success rate of students refers to the number of modules passed as a percentage of all the modules registered in any given year. This can also give an indication of the pass rate of a specific module (DOE, 2001). According to Letseka et al. (2010), a success rate of 80% is considered an acceptable benchmark for contact students (full-time equivalent enrolment students).

2.1.1.2 Dropout rates. Another term used by the DOE (2001) in the NPHE to measure student success, namely *dropout rates*, can be described as the number of students who have not graduated and who have also not returned to the institution to register for the next year of study. It is important to consider several challenges in using this indicator.

Firstly, Lehr, Johnson, Bremer, Cosio, and Thompson (2004) indicated that dropout rates and graduation rates do not correlate directly with each other, which results in conflicting information. This happens because of the use of different definitions and methods of calculation. In SA, this proves to be true, as the CHE (2010) stated that HE institutions across the country do not make use of a consistent definition of dropout rates. Different institutions use different reasons for classifying students as dropouts. While some institutions differentiate between the different reasons that cause students to drop out, e.g., academic factors, financial factors, or the students' choice to discontinue their studies, other institutions do not take the reason for dropping out into account. This limits the efficacy of comparing dropout rates of one institution with another (Mentz, 2012).

Another important aspect is the differentiation between students who drop out and students who discontinue their studies (Murray, 2014; Stratton, O'Toole, & Wetzal, 2005). Students who discontinue their studies temporarily withdraw from HE but complete their education eventually. Stratton et al. (2005) emphasised the importance of distinguishing between these two groups, because failure to do so may lead researchers to identify factors related to true long-term dropout incorrectly. Furthermore, the success of interventions aimed at students at risk might be limited if a distinction between these two groups cannot be made.

2.1.1.3 Retention. Rintala and Kairamo (2011) indicated that a simplistic definition of retention is that students stay enrolled in HE institutions until the completion of a degree. However, Hagedorn (2006) identified at least four basic types of retention.

Firstly, *institutional retention* is described as the most basic type of retention and is calculated by considering the proportion of students that remain enrolled at the HE institution from year to year.

Alternatively, *system retention* is defined as the number of students that remain enrolled in the HE system, regardless of the specific institution where the students are enrolled. This method takes into account students that transfer from one HE institution to another and makes more effective reporting of student graduation possible. However, this measure is very costly and difficult to implement. Furthermore, Letseka et al. (2010) reported that system retention had been impossible in the SA context up to the time of their research.

The third type of retention, *discipline-specific retention*, involves retention within a major area of study. In the SA context, the discipline would refer to a specific programme. Thus, it will be possible for students to be retained in a specific institution, but not in a specific discipline or programme.

The last measure of retention examines retention at micro level. Module-specific retention is measured by scrutinising module completion. Information gathered on this level can indicate low completion rates in specific modules, regardless of whether students were retained at institutional level (Hagedorn, 2006).

Roberts and Styron (2011) were of the opinion that it is very difficult to define all student enrolment behaviours as either retained or not retained and that, at times, current measures of retention fail to account for part-time students, transfer students, and returning students. Hagedorn (2006) agreed that new measures of retention that include these students are being investigated. She furthermore stated that single measures of retention do not portray the full picture of student success and that multiple measures should be taken into account.

2.1.1.4 Enrolment patterns. According to the DOE (2014a), the aim of focusing on student enrolment patterns is to enable student success through access to HE. In SA, considerable effort has been made to increase student enrolment counts, especially in the case of previously disadvantaged students. By planning for and studying enrolment patterns,

institutions and government become aware of the number of students from different groups enrolled for specific academic programmes and are able to assess which areas require further attention. Moreover, enrolment numbers could inform strategies for improving academic development and support, addressing obstacles in the system, increasing student financial support, promoting inclusive institutional cultures and social cohesion, and addressing infrastructure backlogs (DOE, 2014a).

Several researchers pointed to evidence that delaying enrolment for HE decreases the probability that students will persist and obtain a degree (Adelman, 2006; Kuh, Kinzie, Buckley, Bridges, & Hayek, 2007; Mentz, 2012; Pascarella & Terenzini, 2005). Furthermore, the nature of students' enrolment patterns affects their success. Firstly, students who discontinue their studies for a period are less prone to persevere to complete their degrees than students with uninterrupted enrolment are. Additionally, full-time enrolled students are more likely to persist than their part-time counterparts (Kuh et al., 2007; Murray, 2014; Mentz, 2012; Pell Institute for the Study of Opportunity in Higher Education, 2015).

Bunting and Cloete (2004) called attention to several inadequacies of the above-mentioned performance indicators on institutional level. The first shortcoming is that these indicators focus on inputs and outputs, but do not consider the quality and broader social aspects of education. Secondly, all the indicators are of a quantitative nature and therefore do not consider the complexity of student success. The third limitation is that these quantitative indicators individually present no context of what is being measured.

As can be seen from the discussion above, the use of institutional conceptualisations of academic success is of utmost importance, but all of these conceptualisations present with some inherent limitations, which might result in a skewed image of the true nature of student academic success in HE.

2.1.2 Individual conceptualisations of academic success. In contrast to institutional conceptualisations, which are important in reporting institutional and national trends in academic success in HE, many researchers prefer to use a more individual or student focus when examining academic success. Also, for the purpose of this study, it is of vital importance to examine academic success from an individual perspective.

When examining individual measures of academic success, opposing approaches emerge (Weaver, 2011; York, Gibson, & Rankin, 2015). On the one hand, supporters of the

testing and assessment approach advocate the use of quantitative assessment measures to determine student success and performance. Kuh et al. (2006) and Weaver (2011) indicated that the promoters of the testing and assessment approach define academic success in terms of students' performance in tests and examinations, postgraduate achievements, and even post-education employment and income. On the other hand, a more holistic view of academically successful students may include qualitative aspects such as students' goals upon their enrolment, students' satisfaction with their HE experience, being comfortable and affirmed in the learning environment, and students' personal development (Kuh et al., 2006; Mentz, 2012; Strauss & Volkwein, 2002; York et al. (2015)). These approaches are discussed in the following sections.

2.1.2.1 Academic success versus academic performance. Academic success and academic performance are related terms that are used interchangeably in various studies; yet, subtle differences exist.

According to Plug, Louw, Gouws, and Meyer (2007), performance can be defined in two ways. Firstly, performance can be viewed as the achievement of a goal, for example passing a test or examination. Secondly, performance can be defined as the level of success that was achieved in a task; for example, the extent to which learning tasks (e.g., tests and exams) was mastered. Kuh et al. (2006) referred to the performance of an individual in a specific assessment task (e.g., test, assignment, or exam) as an important indicator of academic success.

On the other hand, Naudé, Jansen, Greyling, and Esterhuyse (2011) defined academic success as the cognitive and associated skills that enable an individual to master academic information to such an extent that the individual passes the academic year. Leibowitz, Van der Merwe, and Van Schalkwyk (2009) were also of the opinion that academic success is characterised by a combination of students' skills, strengths, and attitudes.

Animasahun (2010) summarised the difference between academic performance and academic success as follows: "Academic performance is a means to an end; academic success is an end in itself. It [academic success] is therefore, the cumulative effect of various good academic performances attained over a period of time" (p. 521). For example, students who achieve consecutive successes in assignments, tests, and exams in a specific module will

ultimately be successful in passing the module. Similarly, success in individual modules will lead to students passing the academic year successfully.

Keeve, Naudé, and Esterhuyse (2012) defined academic performance as an indication of a performance level achieved on a specific assessment task, while academic success is more holistic, including cognitive and non-cognitive factors.

Definitions of *academic performance* seem to indicate quantitative outcomes (like the performance level achieved in a test or exam), while the term *academic success* comprises a combination of qualitative and quantitative outcomes (e.g., performance levels achieved on tasks, as well as students skills, strengths, and attitudes) (Animasahun, 2010; Keeve et al., 2012).

2.1.2.2 Quantitative measures of academic success. Frequently used quantitative measures of academic success include aspects such as students' achievements in academic tasks (e.g., passing a test or exam), as well as the levels of these achievements (e.g., obtaining a distinction in a module) (Kuh et al., 2006; Plug et al., 2007). Mentz (2012) indicated that other commonly used quantitative outcomes include enrolment in postgraduate programmes and students' performance in discipline-specific exams (e.g., professional board exams in the case of psychology graduates).

An important aspect to consider regarding quantitative measures of academic success is the use of performance in a single assessment task or module versus making use of the average performance scores in several assessment tasks or modules over a longer period. Marzano (2000) indicated that, although the use of single performance scores may be helpful in assessing competence in a single domain, the use of average scores in multiple domains is accepted widely as the most effective way to summarise student performance. Howell (2004) and Lazer et al. (2010) were of the opinion that no single assessment can be an accurate indication of student success and that the use of average performance scores will give a better indication of success.

Additionally, a distinction can be made between the dichotomous measurement of quantitative aspects and the continuous measurement thereof. Dichotomous measurements only allow for students' performances to fall into one of two categories (e.g., pass or fail), whereas continuous measurements also take into account the extent to which students are successful or not (e.g., students with a higher average will be more successful than students

with a lower average will be, although both groups of students have passed their academic year and can thus be regarded as academically successful). According to Keeve et al. (2012), continuous measurements of academic success will give a more comprehensive picture of student success than dichotomous measurements will.

Mentz (2012) as well as Sahraee, Mahdian, and Dinarvand (2015) stated that, although quantitative outcomes are more easily defined and measured than qualitative outcomes are, the full meaning of academic success is not always captured by quantitative outcomes. Moreover, quantitative outcomes used independently fail to indicate the complexity and context of student success (Bunting & Cloete, 2004). Consequently, a combination of qualitative and quantitative outcomes is preferred.

2.1.2.3 Qualitative measures of success. In the previous section, the need for also taking into account qualitative outcomes of academic success was pointed out. The American Federation of Teachers (AFT) for HE (2011) was of the opinion that not enough emphasis is placed on the qualitative aspects related to student success. The AFT for HE (2011) postulated that an important aspect to take into account is students' goals for themselves. They declared that measuring student success merely by using degree attainment will reflect a misinterpretation of success. Students' academic goals must be evaluated throughout their educational career to enable a better perspective of student success.

The AFT for HE (2011) highlighted three factors that it believed are at the centre of student success, namely exposure to knowledge in a variety of areas, the development of intellectual abilities, and the attainment of applied professional and technical skills. Various researchers pointed to the importance of qualitative academic success outcomes, such as engagement in educationally purposeful activities, student satisfaction, the acquisition of knowledge, skills and competencies, the attainment of educational goals, the extent to which students feel comfortable in their learning environment, as well as personal development (Astin, 1993; Kuh et al., 2006, 2007; Sahraee et al., 2015; Strauss & Volkwein, 2002).

In SA, an outcome-based educational system (OBE) was implemented after 1994. The outcomes indicate certain levels of knowledge and skills that students have to master by the end of their learning process. Although these outcomes are ultimately reflected in test scores and performance levels, the OBE system also takes into account more holistic and qualitative aspects of success by considering the skills that students have attained during the process of

active learning (Davin, 2009; Mokhaba, 2005). The knowledge, values, and skills highlighted by OBE are aligned with the expectations of the South African Qualifications Authority (SAQA) (1997), such as the importance of thought and exploration of diverse strategies for successful learning, participation in various communities as responsible citizens, as well as cultural and ethical sensitivity in different social contexts.

However, qualitative factors pose problems of their own, as the measurement of qualitative factors can be very expensive and time consuming (Mentz, 2012).

2.1.2.4 A holistic and contextualised conceptualisation of academic success. From the discussions in the previous sections, the importance of both quantitative and qualitative measures of academic success to obtain a more holistic view of student success is clear. Keeve et al. (2012), Kuh et al. (2007), Leibowitz et al. (2009), and Sahraee et al. (2015) indicated that, although direct (quantitative) measures of students' academic success (performance in tests and exams) are of great value, measures of success must be broadened to include qualitative aspects.

The current study aimed at providing a holistic conceptualisation of academic success that includes both quantitative and qualitative measures of success. In terms of quantitative aspects of academic success, students' averages in core modules were used to determine their academic success. The focus was not only on students' achievements in one specific academic task or assessment, but included various academic performances over a period. Furthermore, continuous measurement of students' performances was utilised by considering the extent to which students were successful or not (final modules marks), rather than just classifying them as passing or failing. This was complemented by qualitative measures such as students' experiences and perceptions of their own success. Thus, the term *academic success* was favoured above the term *academic performance*.

2.2 Theoretical Perspectives on Academic Success

Kuh et al. (2006), as well as Pascarella and Terenzini (2005), agreed that a number of sound theoretical perspectives and approaches are utilised to explain academic success. No single theoretical model is comprehensive enough to explain student success and retention accurately. The vast number of student characteristics, educational policies, and institutional conditions that relate to student success are just too complicated. According to Kuh et al. (2006), theories approach student retention and success from various points of view, i.e.

psychological, sociological, organisational, cultural, and economic perspectives. Although each perspective focuses on academic success from a unique point of view, some overlap exists between the different perspectives. Taken together, the various theoretical perspectives of student success provide a holistic account of the diverse factors pertaining to student persistence and success (Kuh et al., 2006).

Several psychological theories have been used to attempt to explain the complicated process of student success and retention. The focus of psychological theories is on individual personality attributes (Al-Dossary, 2008). These include Rousseau's (1995) psychological contract theory, Bandura's (1997) self-efficacy theory, Rotter's (1966) locus of control model, Dweck's (2000) theory on self-intelligence, as well as Bean and Eaton's (2001-2002) attitude-behaviour theory. Although Bandura's (1997) theory was not specifically aimed at examining academic success, he and other researchers did investigate the effect of self-efficacy on academic success (Bandura, Barbaranelli, Caprara, & Pastorelli, 1996; Chemers, Hu, & Garcia, 2001; Komarraju & Nadler, 2013). Similarly, while Rotter's theory was developed initially as a theory of personality, several researchers have since used his theory in examining academic success (Bar-Tal & Bar-Zohar, 1977; Findley & Cooper, 1983; Stipek & Weisz, 1981). Models that are discussed later in this section that relate to the psychological perspectives of success are Astin's (1984) notion of the psychological energy (motivation) that students devote to their academic experience. Braxton et al. (2004), Kuh et al. (2006), and Wilson-Strydom (2010) also mention psychological aspects such as students' motivation and academic self-efficacy as important entry characteristics in students' success.

Sociological perspectives of student retention are utilised to focus on the social forces that are of importance in students' success (Tinto, 1993). Sociological perspectives include the work of Spady (1970, 1971) and Tinto (1975). Both of these models, as well as some of the models that were based on the work of Spady (1970, 1971) and Tinto (1975), are included in the discussion below (Berger & Milem, 1999; Braxton et al., 2004; Cabrera et al., 1992; Jama et al., 2008; Pascarella & Terenzini, 1980).

On the other hand, organisational approaches to student success emphasise the institutional structures and processes that could affect student retention. Institutional aspects include the size of the institution, selectivity, resources available, and student-staff ratios (Kuh et al., 2006). Bean and Metzner (1985) incorporated external factors with their attrition model while acknowledging the importance of students' behavioural intention to persist. However,

Kuh et al. (2006) argued that the relationship between features of institutional functioning and student behaviour are not well explained in Bean's model; therefore, they developed their own model to explain student success. Both these models are discussed in the section below.

Related to organisational approaches, cultural perspectives focus on the effect of the culture of the institution on the academic success of students. Kuh et al. (2006) reported that many historically disadvantaged and underrepresented students encounter challenges when they enrol in HE. This is because the patterns and structures of the institution are biased toward traditional students (Thomas, 2002). In SA, the role of the institutional culture on student success is indicated by the CHE (2010). Cultural perspectives include Bourdieu's (1977, 1984, 1986) cultural capital theory, as well as Ogbu's (1990) cultural-ecological (CE) theory of minority student performance. Bourdieu's (1977, 1984, 1986) theory is discussed later in this section to gain a better understanding of the effect of cultural aspects on academic success.

Lastly, by making use of economic perspectives, the factors that affect student retention are viewed in terms of costs and benefits. The college choice nexus model of Paulsen and St. John (1997, 2002) is a three-stage model that includes manners in which socioeconomic factors could affect students' choices to attend HE. Furthermore, it also consists of the effect of students' experiences at the HE institution on their judgments as to whether the benefits of studying exceed the cost thereof (Paulsen & St. John, 2002). Several of the models and theories discussed below include socioeconomic and financial aspects as important variables in students' success (Bean & Metzner, 1985; Braxton et al., 2004; Cabrera et al., 1992 Jama et al., 2008; Kuh et al., 2006; Reason et al., 2005).

In the following sections, some of the most widely used theories and models of academic success are described to shed light on the complicated matter of student retention and success.

2.2.1 Spady's theory of student departure. Spady (1970) was the first to apply Durkheim's (1961) theory of suicide to student dropout (Aljohani, 2016). According to Durkheim (1961), individuals are more likely to commit suicide when they are not sufficiently integrated into society on two levels, namely moral (value) integration and collective affiliation. Spady (1970) (see Figure 2) postulated that, when the HE system is

viewed as a social system with its own values and social structures, one can treat dropout from the HE social system in a manner equivalent to that of suicide.

Spady (1970) proposed that five variables (academic potential, normative congruence, grade performance, intellectual development, and friendship support) contribute directly to students' social integration and could influence dropout decisions indirectly through the mediating variables of satisfaction and commitment. According to Spady (1970), family background affects both the academic potential and the normative congruence of students. He defined students' normative congruence as students' goals, orientations, interests, and personality dispositions, as well as the consequences of the interaction between these attributes and the different subsystems of the HE environment. Grade performance and intellectual development are influenced by students' academic potential, whereas grade performance, intellectual development, and friendship support are influenced by students' normative congruence. Moreover, normative congruence, grade performance, intellectual development, and friendship support all affect students' social integration. In turn, social integration influences students' satisfaction with the HE institution, which consequently affects students' commitment to the institution (Al-Dossary, 2008; Aljohani, 2016; Hodum, 2007; Jobe et al., 2016; Seidman, 2005).

Spady (1970) postulated that students' levels of commitment to the institution have a direct effect on students' decisions to drop out of the HE institution. In addition, academic performance has a direct effect on dropout decisions because students with poor academic performances may be dismissed for academic reasons. Furthermore, students' commitment to the institution have a direct effect on students' normative congruence by altering students' goals, motivation, and interests (Demetriou & Schmitz-Sciborski, 2011).

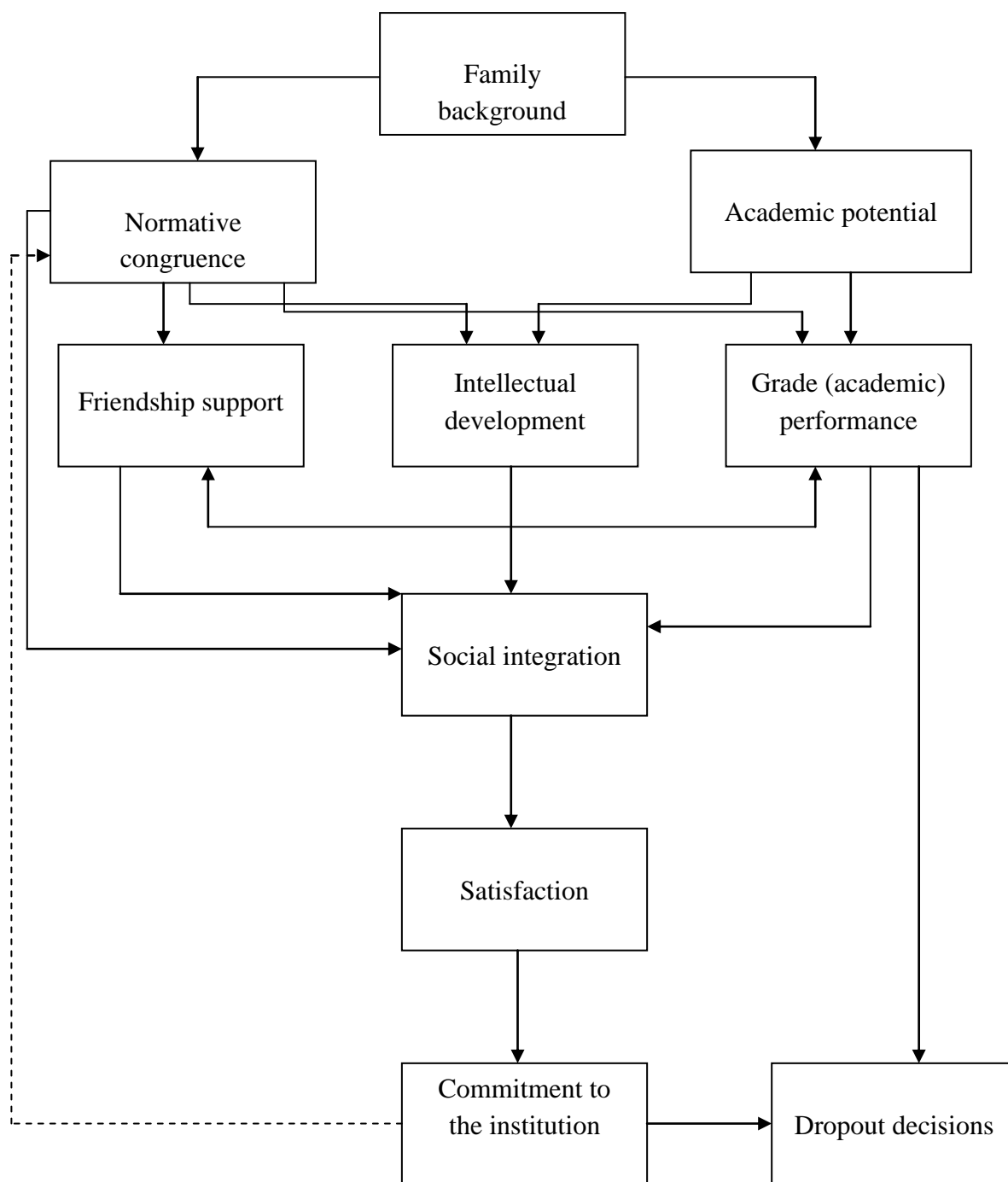


Figure 2. Spady's (1970) theory of student departure. Adapted from Spady (1970, p. 79).

In 1971, after Spady had applied the model in a longitudinal study, he modified it by adding variables and the changing relationship between variables. Spady (1971) added structural relations as a variable and made friendship support a division thereof because he found friendship support to be directly dependent on elements in the family background and normative congruence. Most of the main revisions in the model occurred due to differences based on gender. Spady (1971) found that grade performance was the most important factor in attrition for male students, while commitment to the institution and social interaction were secondary factors. For female students, however, dropout decisions were based primarily on their commitment to the institution and secondarily on their academic performance.

As more students of diverse races enrolled in HE institutions, Spady's (1970, 1971) model was criticised as being repressive and normative. Furthermore, the idea of membership or the meaning of affiliation was questioned, as the model failed to acknowledge the presence of multiple communities in an HE institution and students' various affiliations with these communities (Hader, 2011).

2.2.2 Tinto's student integration theory. Tinto's (1975) student integration theory is one of the most widely discussed and researched models of student success. The wide-ranging nature of this model is partly responsible for its international appeal (Braxton, 2003). Tinto's theory is based on Durkheim's (1961) theory of suicide and Spady's (1970) theory of student departure (Aljohani, 2016; Bontrager, 2015; Jobe et al., 2016).

Tinto's (1975) theory (as presented in Figure 3) can be viewed as a longitudinal process in which the degree to which students become integrated with the academic and social spheres of the institution is of paramount importance in student success (Bontrager, 2015; Demetriou & Schmitz-Sciborski, 2011; Rovai, 2003; Tinto, 1993). Academic integration refers to students' academic performance and intellectual development, whereas social integration can be defined as the quality of students' relationships with peers and staff (Al-Dossary, 2008; Rovai, 2003). According to Tinto (1975), students' academic performance relates to their meeting the standards of the academic institution in which they are enrolled, while intellectual development pertains to students' identification with the norms of their academic system. Moreover, social integration occurs largely through informal peer group interactions, semi-formal extracurricular activities, and interactions with academic and administrative staff in the HE institution. Successful social interactions in these areas result in varying degrees of social communication, support from friends, support from academic staff,

and collective affiliation, which in turn can influence students' commitment to the institution (Brundsen, Davies, Shevlin, & Bracken, 2000).

Tinto (1993) pointed out that both types of integration need to be present. Furthermore, academic and social integration may have a reciprocal relationship whereby too much focus on one of these aspects may lead to a lower level of integration in the other (Manan, 2007). Tinto (1975) explained that specifically excessive interaction in the social domain may detract from time spent on academic activities and, therefore, could lower academic performance and eventually lead to academic dismissal from the HE institution. He added that voluntary dropout rarely occurs because of excessive social interaction. Furthermore, whether excessive social interaction would lead to poor academic performance appears to be related to the types of individuals with whom the interaction occurs. If friendship ties are established with academically oriented individuals, the tension between the academic and social spheres of the HE may be alleviated; however, the opposite also seem to be true (Tinto, 1975).

Tinto (1975) indicated that students enter university with several background characteristics, including family backgrounds, individual attributes, and previous academic experiences. Students' background characteristics influence students' initial goals and commitment to the institution at the beginning of their HE careers (Strahn-Koller, 2012). However, the initial goals and levels of commitment to the institution can change over time because of students' level of integration with academic and social spheres of the HE institution (Brundsen et al., 2000; Manan, 2007). Tinto (1975) stated that, finally, the interaction between individuals' commitment to the goal of college completion and their commitment to the HE institution will ultimately result in their persistence or dropout decisions.

In later research, Tinto (1987, 1993) utilised Van Gennep's (1960) theory regarding rites of passage and its' three stages to describe the process of student integration (Aljohani, 2016). Van Gennep (1960) believed that, in order for individuals to pass from one stage of the lifecycle to another, three distinct stages of transformation occur, namely separation, transition, and incorporation. Tinto (1987, 1993) applied Van Gennep's (1960) work to his student departure theory by describing the changes that students undergo as they transform from adolescents to adults during their HE experience (Huffman, 2010; Lemmens, 2010).

Tinto (1987, 1993) was of the opinion that students drop out from HE institutions when their rites of passage are incomplete. The first stage of the students' experience is *separation*. In this stage, it is required of students to dissociate themselves from their previous communities (family, school, friends, and place of residence). These previous communities have different values, and norms, as well as behavioural and intellectual styles, from those of the HE institution. Therefore, some degree of transformation is necessary to enable students to integrate with the HE system successfully (Elkins, Braxton, & James, 2000). The second stage of students' experience is *transition*. In this stage, students find themselves separated from previous communities but not fully integrated with the new HE community. Many students withdraw from the HE institution at this stage because of the struggle to cope with the stressful nature of the transition. During this stage, students' goals and commitment to the institution play an integral role. If students are committed to the goal of completing their education and to the institution, the stressors of this stage can be conquered (Tinto, 1987). The last stage of the process, *incorporation*, can happen only after students have completed the stages of separation and transition. At this stage, students are expected to have become integrated or incorporated in the HE community. Students are considered to be integrated successfully with the HE community when certain values and habits are adapted and solidarity in the HE community is achieved (Huffman, 2010; Lemmens, 2010).

Despite the popularity of Tinto's theory, it has only modest empirical support (Kuh et al. 2006). Braxton, Sullivan, and Johnson (1997) appraised Tinto's theory and found that only eight of the 11 multi-institutional research projects that aimed to link academic integration and persistence could provide proof of the relationship. In single-institution projects, 19 of the 40 studies could not find any link between academic integration and persistence. Kuh et al. (2006) stated that the relationship between social integration and student persistence could be shown with more success. Increased social integration leads to better commitment to the institution, which in turn influences persistence positively. Moreover, Paulsen and St. John (2002) stated that the theory neglects to explore the role of financial aspects on student success. Finally, Tinto (1993) pointed out that the theory fails to distinguish between factors leading students to transfer from one HE institution to another, rather than drop out.

Tinto (1993), as well as Tinto and Pusser (2006), refined the original theory and ultimately developed two new models. Firstly, Tinto's (1993) longitudinal model of institutional departure is a modification of his original theory. Tinto (1993) added two constructs: external commitments and intentions. Tinto (1993) stated that students' intentions

Factors and experiences related to academic success

have a direct influence on their commitment to their goals and to their commitment to the institution. In turn, both of these directly influence student retention. External commitments include aspects such as families, neighbourhoods, peer groups, and work environments, which can also directly influence students' commitment to their goals and commitment to the institution (Al-Dossary, 2008; Demetriou & Schmitz-Sciborski, 2011). Secondly, in Tinto and Pusser's (2006) model of institutional action for student success, the focus is on the ways in which the institution must address student experiences in the classroom, as well as faculty actions to create a culture in which students are expected to succeed. The emphasis is not on student characteristics or forces outside the institution because they are believed to be beyond the control of the institution'. Aspects such as the level of support that is offered to students, feedback given to students, and how well students are integrated with the HE community are regarded as important.

Factors and experiences related to academic success

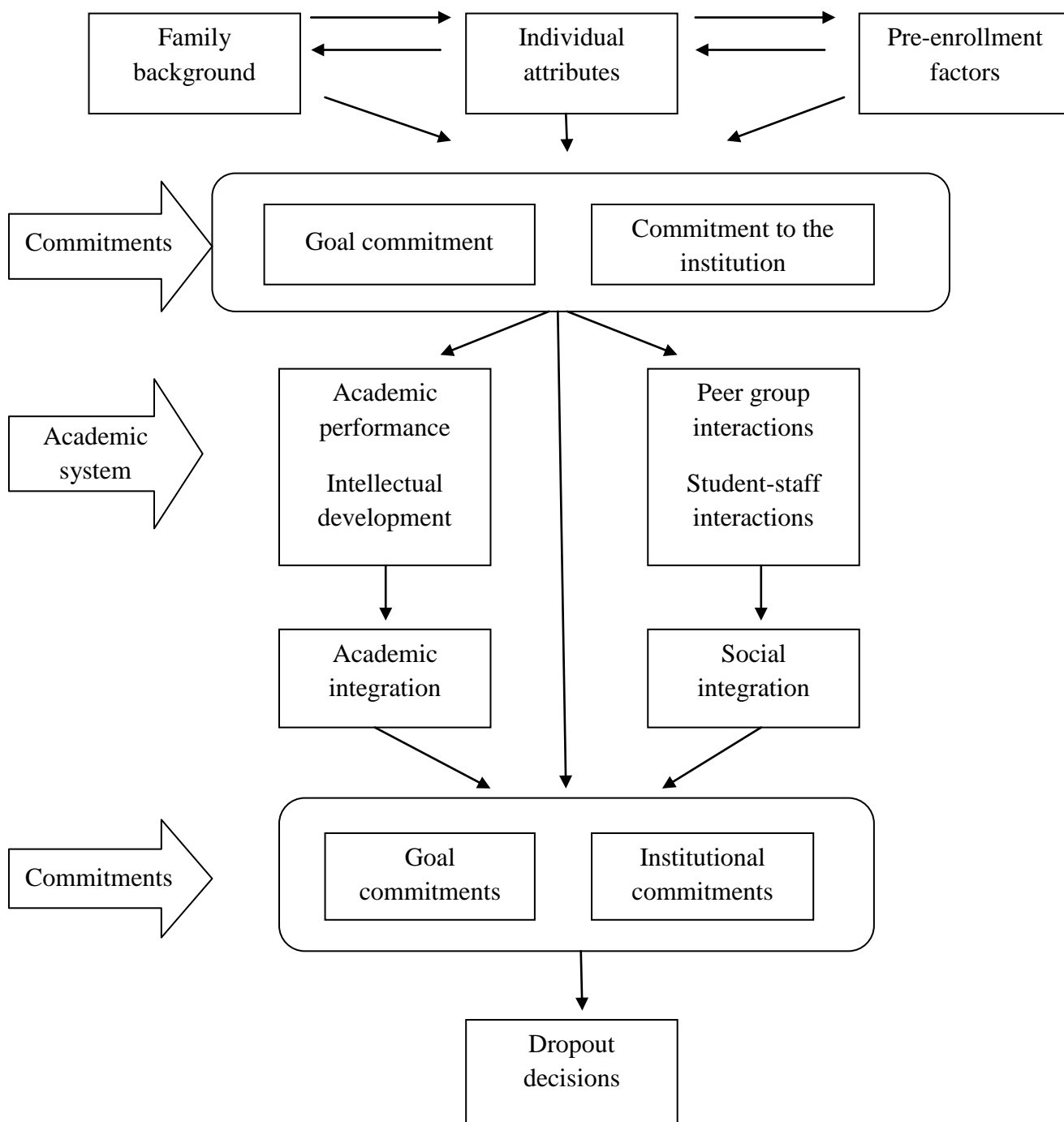


Figure 3. Tinto's (1975) Student integration theory. Adapted from Tinto (1975, p. 95).

2.2.3 Astin's student involvement theory. In his student involvement theory (as presented in Figure 4), Astin (1984) postulated that students learn by becoming involved. This theory has its roots in a previous longitudinal study of dropout phenomena in which Astin (1975) attempted to identify factors in the HE context that affect persistence of students. In this theory, the degree to which students are involved in the institution is imperative to student success and retention (Jobe et al., 2016; Rand, 2016).

Astin (1984) defined student involvement as the level of physical and psychological energy that students devote to the academic experience. He views physical energy as students' behaviour and psychological energy as the level of motivation that students possess. Therefore, highly involved students can be depicted as anyone who dedicates significant energy to studying, spends adequate time on campus, actively participates in student organisations, and interacts frequently with peers and staff.

Astin's (1984) theory includes five basic hypotheses. Firstly, involvement requires the investment of energy (physical and psychological) in various aspects. These aspects may be highly specific or generalised. Secondly, involvement is described as a continuous concept, as different students invest different levels of energy in various objects at different times. Thirdly, students' involvement comprises quantitative and qualitative elements. Consequently, the number of hours students spend on studying and the quality of studying that takes place is of importance. Fourthly, the amount of student learning and development is comparable directly with the quality and quantity of student involvement. Lastly, the success of any educational policy is related to its ability to increase student involvement (Ahmad & Said, 2016; Rand, 2016).

Moreover, Astin (1993) contended that measures of involvement include those at the beginning of the HE career, such as place of residence, prospective degree, and financial aid, as well as factors describing student-environment interaction, such as student involvement with staff and peers, and work and academic effort.

Although much research was done on Astin's (1984) theory, Pascarella and Terenzini (2005) asked the question whether Astin's concepts meet the definitions of a theory. To be confirmed a theory, Pascarella and Terenzini (2005) recommended that Astin's (1984) ideas of student involvement be broadened to include a detailed description of the behaviours being

predicted and the factors thought to influence involvement. Furthermore, the way in which the variables influence one another should be described.

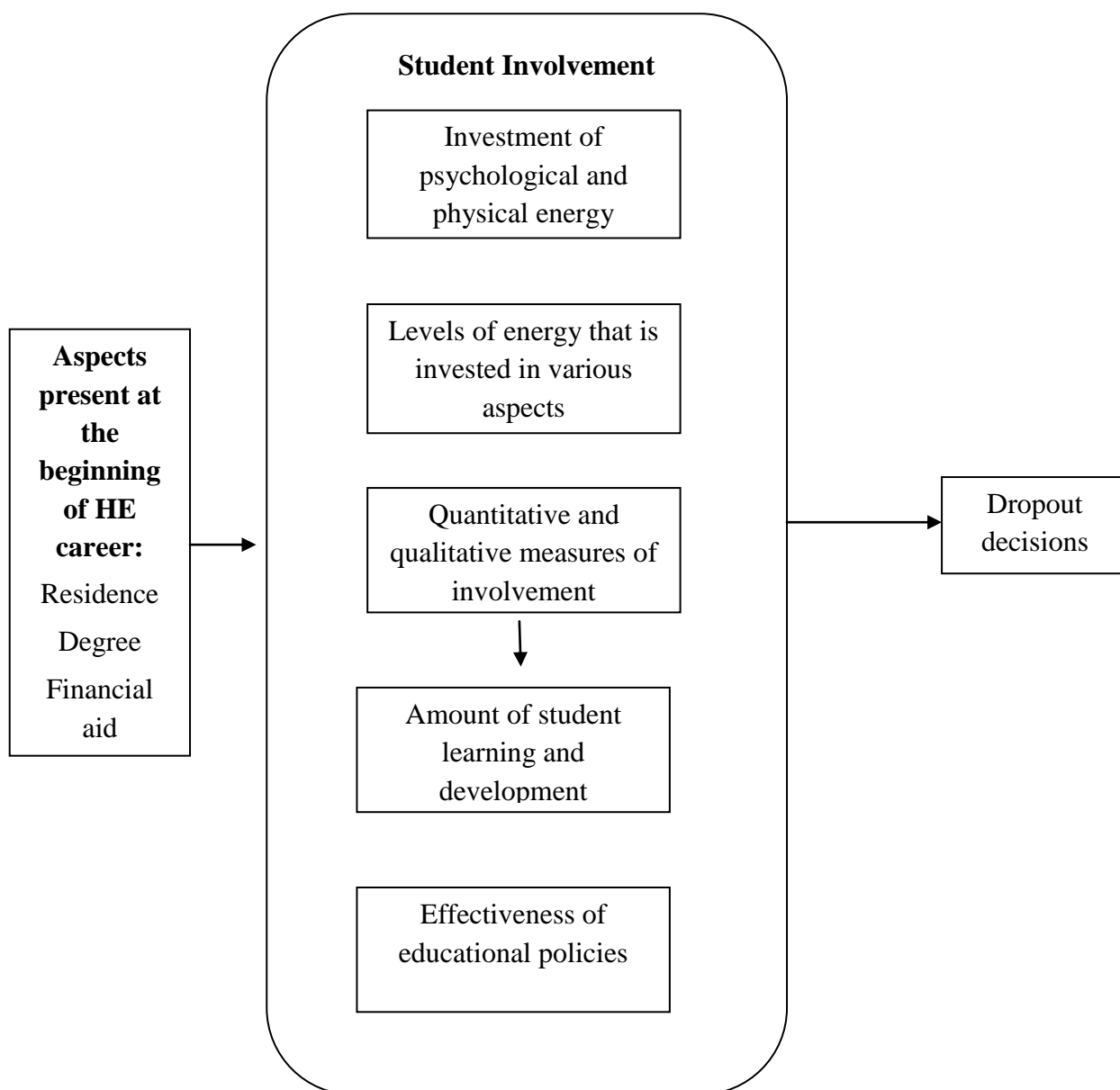


Figure 4: A conceptualisation of Astin's (1984) student involvement theory (pp. 518-519).

2.2.4 Bean and Metzner's student attrition theory. Bean and Metzner's (1985) student attrition theory (as presented in Figure 5) emphasised that students' decisions to leave an HE institution are similar to adults' decisions to leave the workplace (Aljohani, 2016). This theory was developed specifically for non-traditional students because Bean and Metzner (1985) were of the opinion that most retention theories focus too much on socialisation to explain retention and do not consider external factors. External factors include aspects such as finances, hours of employment, outside encouragement, commitment to academic goals, family responsibilities, satisfaction, and stress levels. These external factors could affect the integration of non-traditional students. Non-traditional students are described as individuals older than 24 years, or individuals that do not live on campus or are part-time students, or a combination of these factors. These students are mainly interested in the academic aspects of the institution and are influenced by the social environment of HE institutions to a lesser extent (Bean & Metzner, 1985; Woods, 2016).

According to Bean and Metzner (1985), four sets of variables can influence student retention and success. These variables include academic variables, background and defining variables, environmental variables, and social interaction variables. Academic variables or academic performance variables include aspects such as study habits, absenteeism, the variety of degree programmes available, the fit between student and academic programme, and academic advising, while background and defining variables include aspects such as demographic information, high school experiences, residence status, ethnicity, age, and educational goals. Additionally, environmental factors include aspects such as encouragement and/or support by family members and employers, hours of employment, family responsibilities, and finances. Lastly, social interaction variables include the quality and quantity of students' interaction with the social system of the HE institution.

In interaction, these variables lead to academic outcomes as measured by academic performance and psychological outcomes as measured by aspects such as goal commitment, commitment to the institution, stress levels, and satisfaction. Bean and Metzner (1985) found that the most important differences between traditional and non-traditional students in the attrition process is that non-traditional students are affected more by the external environment, whereas social integration variables are more significant in the persistence of traditional students. Thus, when environmental support is positive, students would be expected to remain enrolled because the environmental support compensate for negative academic variables. Likewise, it seems that psychological outcomes are more important to non-traditional students

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than academic outcomes are. Consequently, if scores on both outcomes are high, students are more likely to persist, and if both are low, students are likely to drop out. However, if psychological outcomes are low and academic outcomes are high, students will be likely to drop out, and if psychological outcomes are high and academic outcomes are low, students will likely persist in their education (Al-Dossary, 2008; Woods, 2016).

Some criticism against this model is that, despite all indicators of Bean and Metzner's (1985) model as a good fit for student success research, few scholars have tested its effectiveness (Keller, 2011). Stahl and Pavel (1992) reported that, based on their analysis of data using structural equation modelling, Bean and Metzner's (1985) model was a weak fitting model.

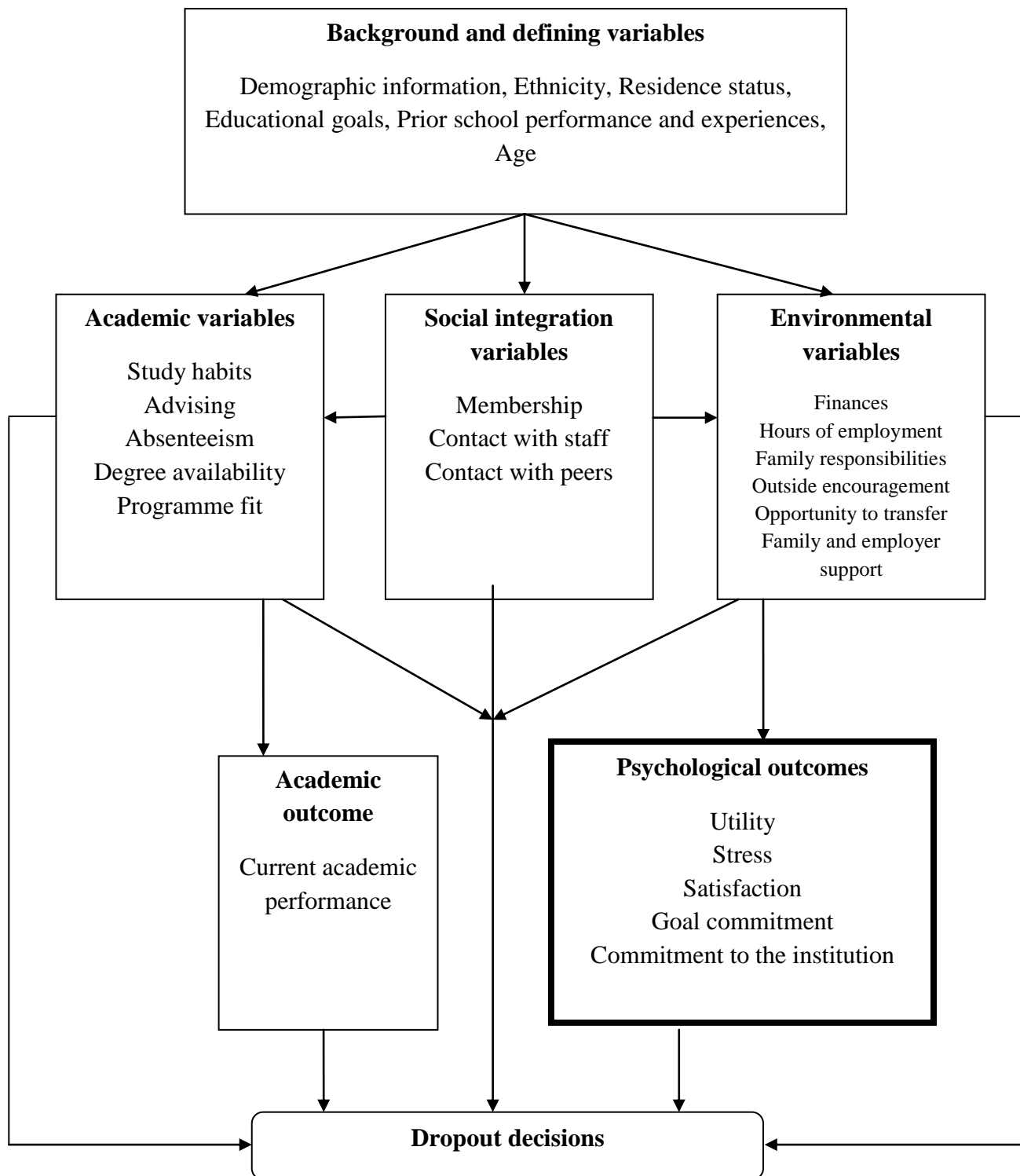


Figure 5. Bean and Metzner's (1985) student attrition theory. Adapted from Bean and Metzner (1985, p. 491).

2.2.5 Cabrera, Castaneda, Nora, and Hengstler's integrated model of student retention. Cabrera et al. (1992) stated that, although various theories and models have endeavoured to clarify the student success process, only two theories have offered comprehensive explanations on student persistence, namely Tinto's (1975) student integration theory and Bean and Metzner's (1985) student attrition model. Cabrera et al. (1992) attempted to provide evidence that there are significant similarities between the two theoretical frameworks and that the two models can be combined to increase the understanding of the process of student success (Aljohani, 2016; Cabrera et al., 1992). These two models were merged into one integrated student retention model (as presented in Figure 6).

Cabrera et al. (1992) examined the similarities between Tinto's (1975) and Bean and Metzner's (1985) theories and concluded that in both models, retention is viewed as a complex set of interactions over time. In addition, pre-enrolment factors are highlighted in both models as important aspects in the adjustment and integration of students. Lastly, the importance of a successful match between the student and the institution for student retention is indicated in both models.

On the other hand, differences also exist between the two theories. Unlike Tinto (1975), Bean and Metzner (1985) focussed on factors external to the institution and view aspects such as parental approval, finances, support from friends, and the chance to transfer to another institution as important. Furthermore, empirical research conducted on the two theories proposes different perspectives on the factors that have the strongest effect on student success. Tinto (1975) suggested that academic integration, social integration, commitment to the institution, and goal commitment have the strongest effect on student success. Bean and Metzner (1985), however, proposed that students' intentions to persist, attitudes, institutional fit, and external factors have the greatest effect on student success (Al-Dossary, 2008).

Cabrera et al. (1992) effectively combined the two models discussed above. In their model, the experiences of students are represented by two elements, namely social integration aspects that include experiences with fellow students and academic integration aspects that involve interactions with academic staff and other staff of the institution. Academic and social integration are affected by students' financial attitudes and the encouragement they receive from family and friends. In turn, academic and social integration experiences affect students' academic performance (academic and cognitive development, as well as academic and intellectual growth) and students' commitment to both the HE institution and the goal of

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obtaining a degree (Al-Dossary, 2008). Students' academic performance and their commitments once again affect their intent to persist, which directly influences their actual persistence. In terms of the strength of the influences between the various factors, Cabrera et al. (1992) found that students' intent to persist has the greatest effect on student persistence, followed by academic performance, commitment to the institution, encouragement from friends and family, commitment to goals, academic integration, financial attitudes, and social integration. In terms of students' intent to persist, commitment to the institution had the greatest effect, followed by encouragement from friends and family, commitment to goals, academic integration, social integration, and financial attitudes.

Cabrera et al. (1992) stated that generalising their findings to other institutions should be approached cautiously because the patterns underlying student persistence may vary at different institutions. However, their findings may be used as a starting point in studying student success at different institutions.

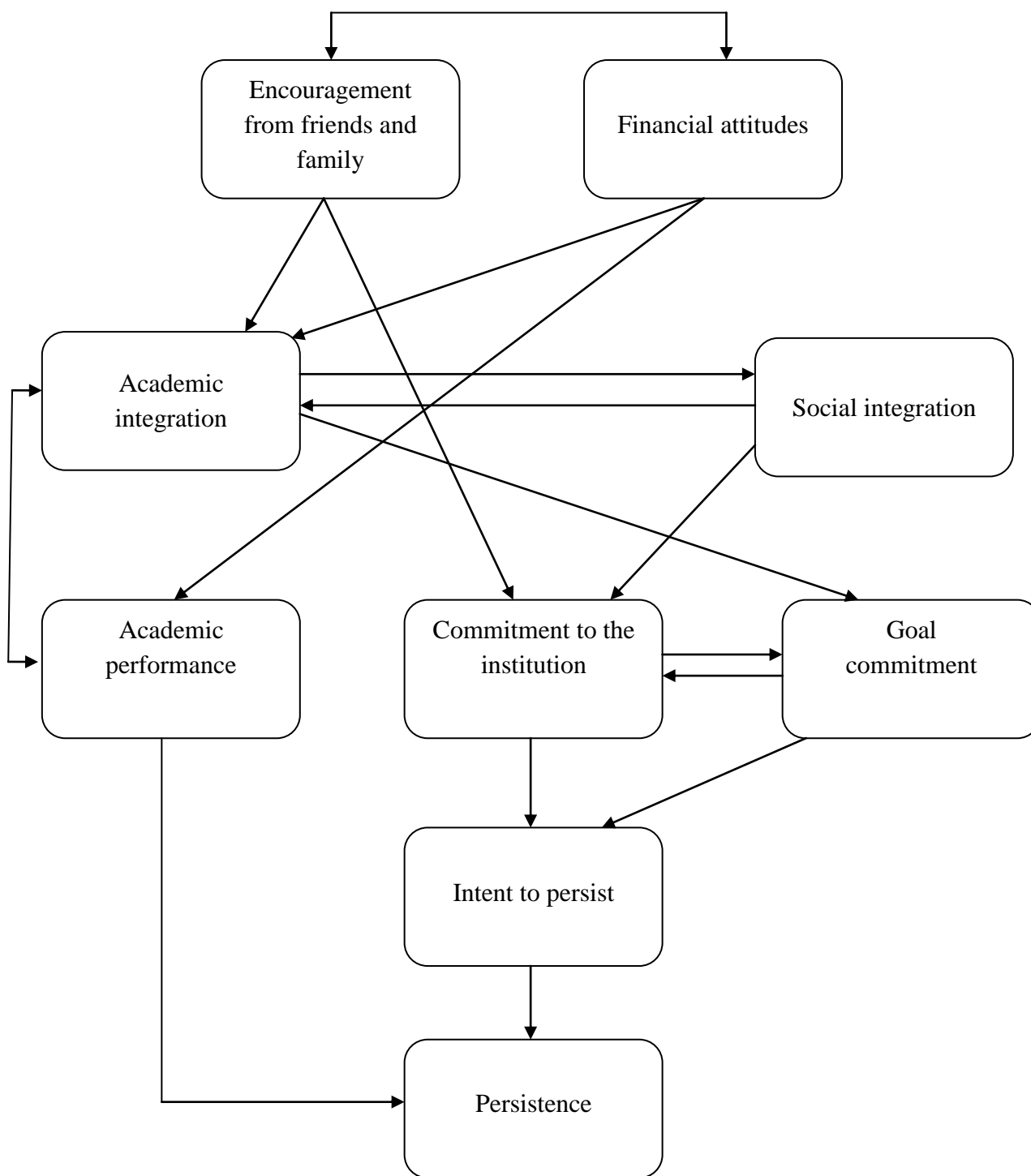


Figure 6. Cabrera et al.'s (1992) integrated model of student persistence. Adapted from Cabrera et al. (1992, p. 153).

2.2.6 Braxton, Hirschy, and McClendon's theory of student departure. Braxton et al., (2004) proposed a revision of Tinto's (1975) model to account for commuter HE institutions (as presented in Figure 7). The contribution of this model involves identifying the background factors related to social integration. Braxton et al. (2004) postulated that students' entry characteristics influence their initial commitment to the institution because it affects students' commitment to the goal of graduation and their commitment to the institution.

Entry characteristics include aspects such as gender, race, ethnicity, socio-economic status, academic ability, motivation, self-efficacy, anticipatory socialisation, high school academic preparation, parental education, and the ability to afford HE. Commitment to the institution is represented in the beliefs and values of the institution. When students' values and beliefs and those of the institution are congruent, students will be more likely to participate in proactive social behaviour and psychosocial engagement. Proactive social behaviour can be described as the tendency to approach the demands and pressures of social integration positively, while psychosocial integration is the level of energy students devote to interactions with peers and involvement in activities of the HE institution (Braxton et al., 2004; Lemmens, 2010).

The greater students' initial commitment to the institution is, the greater the social integration and successive commitment to the institution and persistence will be (Braxton et al, 2004).

As explained in the model, factors that affect withdrawal from HE differ in residential and commuter institutions. Braxton et al. (2004) focussed solely on the academic success of students in commuter institutions. They indicate that in commuter institutions, a further contributor to withdrawal is relevant, namely the external environment. Factors included in this category are finances, support, work, family, and the community. Entry characteristics in commuter institutions also differ from those in residential institutions and include motivation, self-efficacy, empathy, affiliation needs, and socialisation (Braxton et al., 2004; Braxton & Lien, 2000).

Braxton et al. (2004) indicated that their model pertains only to four-year commuter institutions and that other institutions were not included in their study. Furthermore, the model does not identify the departure process for different types of students. Lastly, the model includes student entry characteristics as a general category, and research that is more specific

about family background information, individual attributes, and school experiences is required.

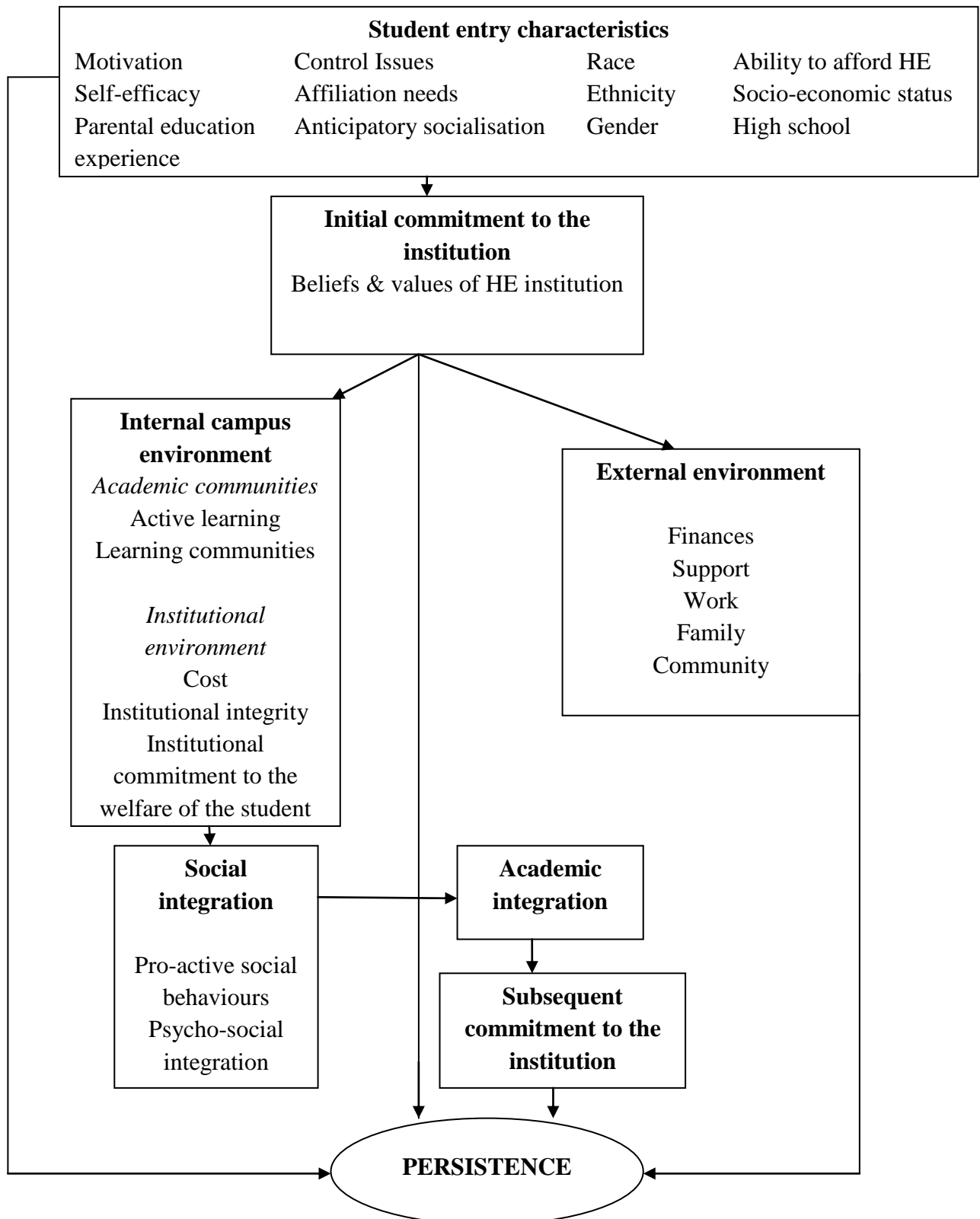


Figure 7. Braxton et al.'s (2004) theory of student departure in commuter colleges and universities. Adapted from Braxton et al. (2004, p. 71).

2.2.7 Milem' and Berger's behaviour-perception-behaviour cycle model. Milem and Berger (1997) proposed that, as students become more involved in HE, they develop observations about the institution that can affect their commitment to the institution and their social integration. Milem and Berger (1997) developed the behaviour-perception-behaviour cycle model (as presented in Figure 8) by using concepts from Astin's (1984) theory of involvement and Tinto's (1975) interactionist model of student departure to describe the process of students making successful transitions into the HE institution and being integrated with the HE system (Gieg, Oyarzun, Reardon, & Gant, 2016; Jobe et al., 2016).

Astin's (1984) ideas about involvement and Tinto's (1975, 1993) views regarding social and academic integration were modified into one model. In Tinto's (1993) model, students become integrated with the HE experience by first separating from experiences, followed by a transition period during which students are exposed to new ideas, practices, and values of the institution. After the transition phase, an incorporation phase follows, characterised by the adoption of norms and acceptance of behaviours of the institution. According to Milem and Berger's (1997) behaviour-perception-behaviour cycle model, students arrive at the institution with certain entry characteristics and different levels of commitment to graduate from the institution. This stage is referred to as the initial commitment to the institution (IC1). As students encounter new ideas and experiences and interact with staff and peers, they begin to develop perceptions regarding these experiences, as well as ideas about the institution. Students' perceptions influence the degree to which they become academically and socially integrated with the HE setting. Being incorporated is explained as the extent to which students feel they "fit" into the HE environment and the degree to which they are supported by the institution. On the other hand, if no or minimal interactions between staff and peers take place, lower levels of academic and social integration can be expected (Waters, 2008).

Furthermore, Milem and Berger (1997) suggested that students' perceptions regarding their HE experiences and their levels of academic and social integration could influence future levels of involvement and commitment to the institution (IC2), as well as decisions regarding departure from HE.

Waters (2008) stated that, although Milem and Berger's (1997) model has been supported in literature, the model was tested at a highly selective institution with a small African American population. Berger and Milem (1999) proceeded to seek further

understanding of the relationship between behavioural involvement and integration with the HE system in their later examination of the behaviour-perception-behaviour cycle model by addressing the limitations of their previous work. Berger and Milem (1999) explained that, although their original model extends knowledge regarding the student persistence process, the model can be improved in three ways. Firstly, only the direct effects among variables were examined. It is important to consider indirect effects among variables as well (Pascarella & Terenzini, 1991). Secondly, the model was developed in an exploratory manner. Berger and Millem (1999) suggested a more prudent examination of how the student persistence process works. Lastly, the authors state that the original model used a proxy measure of persistence (students' intent to return) rather than an actual measure of student persistence.

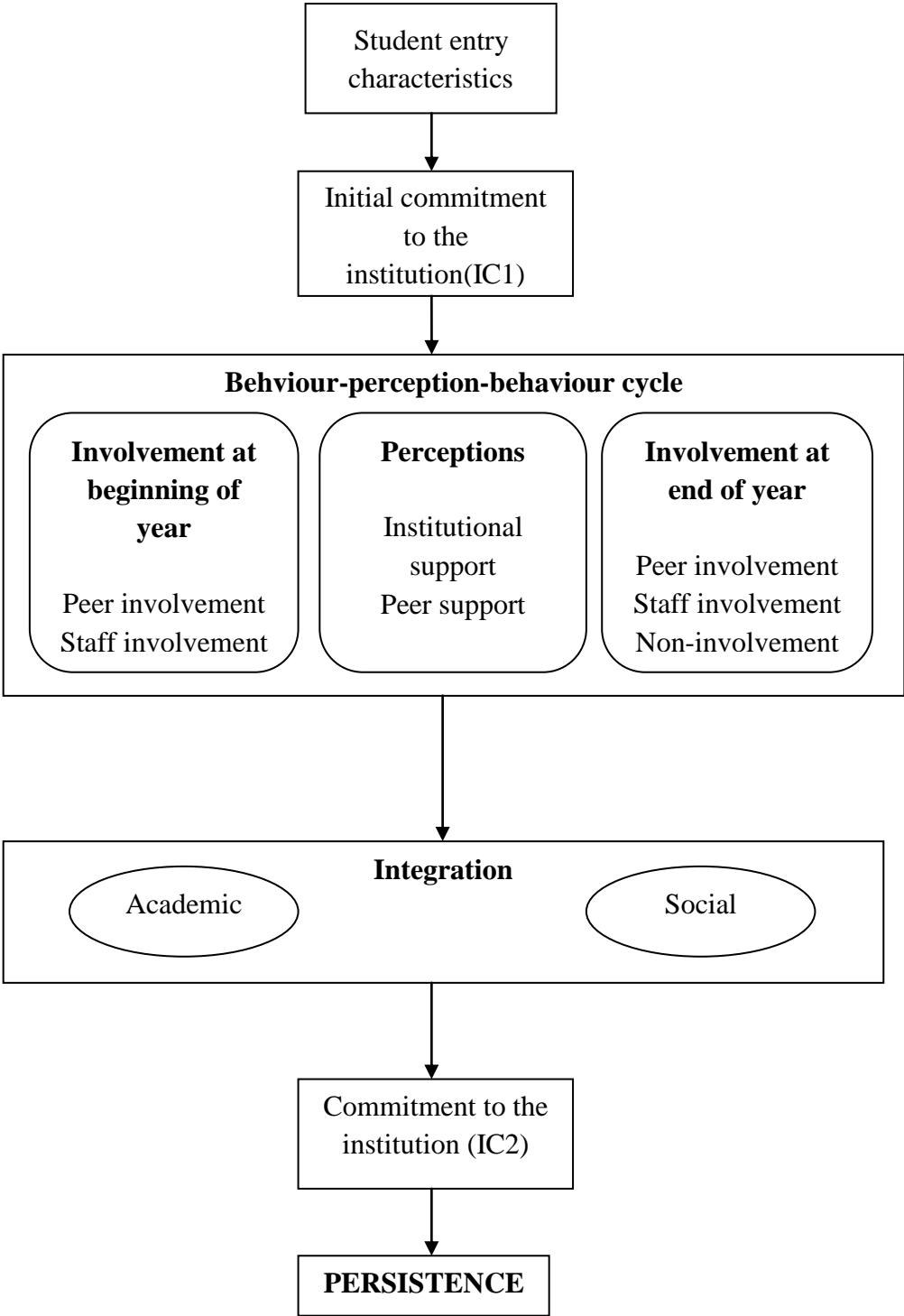


Figure 8. Berger and Milem’s (1999) behaviour-perception-behaviour cycle model. Adapted from Berger and Milem (1999, p. 645)

2.2.8 Bourdieu's cultural capital theory. Bourdieu (1977, 1984, 1986) hypothesised that cultural capital that is held by families and individuals and transferred from one generation to another, is an important contributing factor in individuals' academic success (see Figure 9) (Jensen & Jetten, 2015). Bourdieu (1977, 1984, 1986) described cultural capital as a scarce resource that provides individuals with knowledge and practical skills (specifically the ability to use and understand academic language) of the educational system. Moreover, he was of the opinion that cultural capital is acknowledged and rewarded by the institution and peers in the HE institution.

According to Bourdieu (1977, 1984), cultural capital promotes academic success through different pathways. Firstly, children inherit cultural capital from their parents. This can happen passively through exposure to their parents' cultural capital, or actively when parents deliberately endeavour to transfer cultural capital to their children (Jæger, 2011). This cultural capital is embedded in children's knowledge, language, and mannerisms; in what Bourdieu (1977) termed their *habitus*. Whereas cultural capital is defined as knowledge and skills, *habitus* is defined as a set of attitudes and values. Bourdieu (1977, 1984, 1986) argued that cultural capital is introduced in higher socio-economic class homes and enables students from a higher socio-economic class to be more successful in achieving success than students from a lower socio-economic class are.

Secondly, Bourdieu (1977, 1984, 1986) posited that the educational system assumes that students will possess cultural capital and that HE systems are designed to identify and reward cultural capital. However, because not all students possess cultural capital, teaching and learning can be inefficient to a great extent. Furthermore, academic and other staff may misinterpret students' cultural capital as demonstrations of actual academic competence and then develop biased opinions of students. Biased perceptions of staff could lead to preferential treatment by staff and peers from an early stage in students' educational careers. This, in turn, could lead to better academic development because of more inputs from staff and peers (Jæger, 2011). Thus, it will enable students from higher socio-economic classes to maintain their superior class position and make it very difficult for students from lower socio-economic classes to succeed in the educational system.

In SA, home language versus a second or additional language is an aspect of cultural capital that is of particular relevance (Boughey, 2002; Leibowitz, 2005). Most learners in SA are educated in a language that is not their home language. Various researchers from SA and

international settings have indicated the importance of language proficiency as a component of the social class-related discourse that students acquire, which has a strong effect on their academic performance on HE level. Furthermore, the geographical and psychological segregation of many young South Africans have led to limited ranges of experience on many levels. The result of limited experiences is that what is taught in HE remains abstract and theoretical for many students (Boughey, 2002; Hornberger & Chick, 2001; Leibowitz, 2005).

According to Jæger (2011), although the positive effect of cultural capital on academic success has been indicated by various research studies, Bourdieu's (1977, 1984, 1986) theory can be criticised for not being precise enough regarding exactly which aspects associated with higher-class homes lead to cultural capital and how these resources affect academic success.

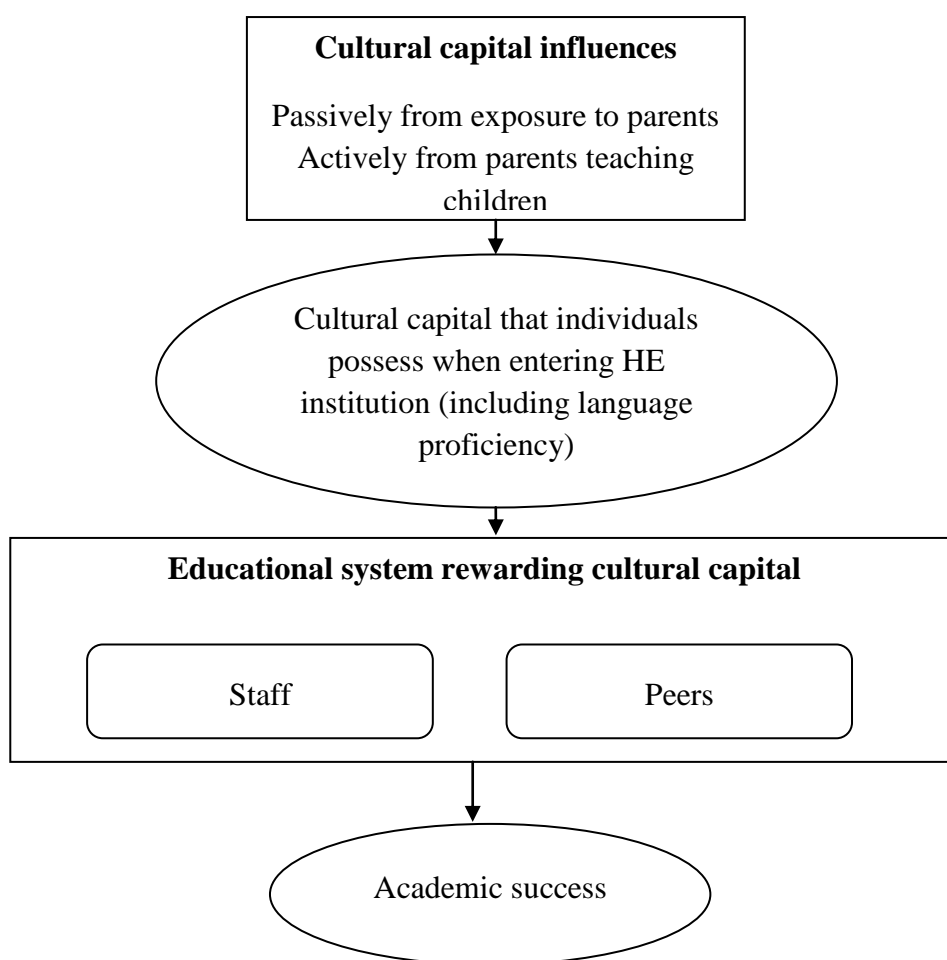


Figure 9. Bourdieu's (1986) forms of capital. Adapted from Bourdieu (1986, pp. 241-258).

2.2.9 Pascarella and Terenzini's attrition theory. The attrition theory of Pascarella and Terenzini (1980) was built on the work of Spady (1970), Astin (1984), and Tinto (1975). Pascarella and Terenzini (1980) highlighted the informal interactions between students and faculty as important aspects in student success. Not only the frequency of informal contact between staff and students but also the quality of such contact is regarded as important (Abdullah, Teoh, Samsilah, & Jegak, 2015; Aljohani, 2016; Dornan, 2015). Pascarella and Terenzini (1980) stated that such non-academic contact is of greater importance to students who have a lower initial commitment to their goals of HE completion. Therefore, regular quality informal contact with staff could serve as a compensatory factor in student persistence, especially for students who seem most likely to drop out.

Furthermore, Pascarella and Terenzini (1980) stated that it is necessary to consider several factors to understand the exceptional influence of non-academic contact between a student and staff on student success. These aspects include students' background experiences, students' actual experiences of HE, and salient institutional factors such as the institution's culture, structure, and standards.

As presented in Figure 10, student characteristics, institutional characteristics and three independent variables (informal contact with staff, educational outcomes, and other HE experiences) influence one another (Pascarella & Terenzini, 1980). Student characteristics include students' family backgrounds, aptitudes, aspirations, personality, goals, secondary school achievements and experiences, expectations of HE, and openness to change, while institutional factors comprise aspects such as the staff culture, organisational structure, administrative policies, institutional size, and academic standards. Student background characteristics and institutional factors reciprocally influence one another, while the independent variables – informal contact with staff, educational outcomes, and other HE experiences – are all influenced by student background characteristics and institutional factors (Aljohani, 2016; Dornan, 2015; Pascarella & Terenzini, 1980).

Moreover, all the independent variables influence one another reciprocally. Informal contact with staff encompasses aspects like the context in which contact takes place, the amount of exposure to informal contact, the focus of the contact between students and staff, and the effect of such contact. Educational outcomes include students' academic performance, intellectual and personal development, academic aspirations, satisfaction, and integration with the HE institution. Lastly, other HE experiences comprise the peer culture, classroom

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experiences, extracurricular activities, and leisure activities. Since all three of the independent variables influence one another, a problem in one area may affect another area. Educational outcomes are the only variable that has a direct effect on students' decision to drop out. All other aspects affect the decision to drop out or persist indirectly through their effect on educational outcomes (Dornan, 2015; Pascarella & Terenzini, 1980).

Al-Dossary (2008) indicated that this theory has been criticised because it was developed from a study at a single institution.

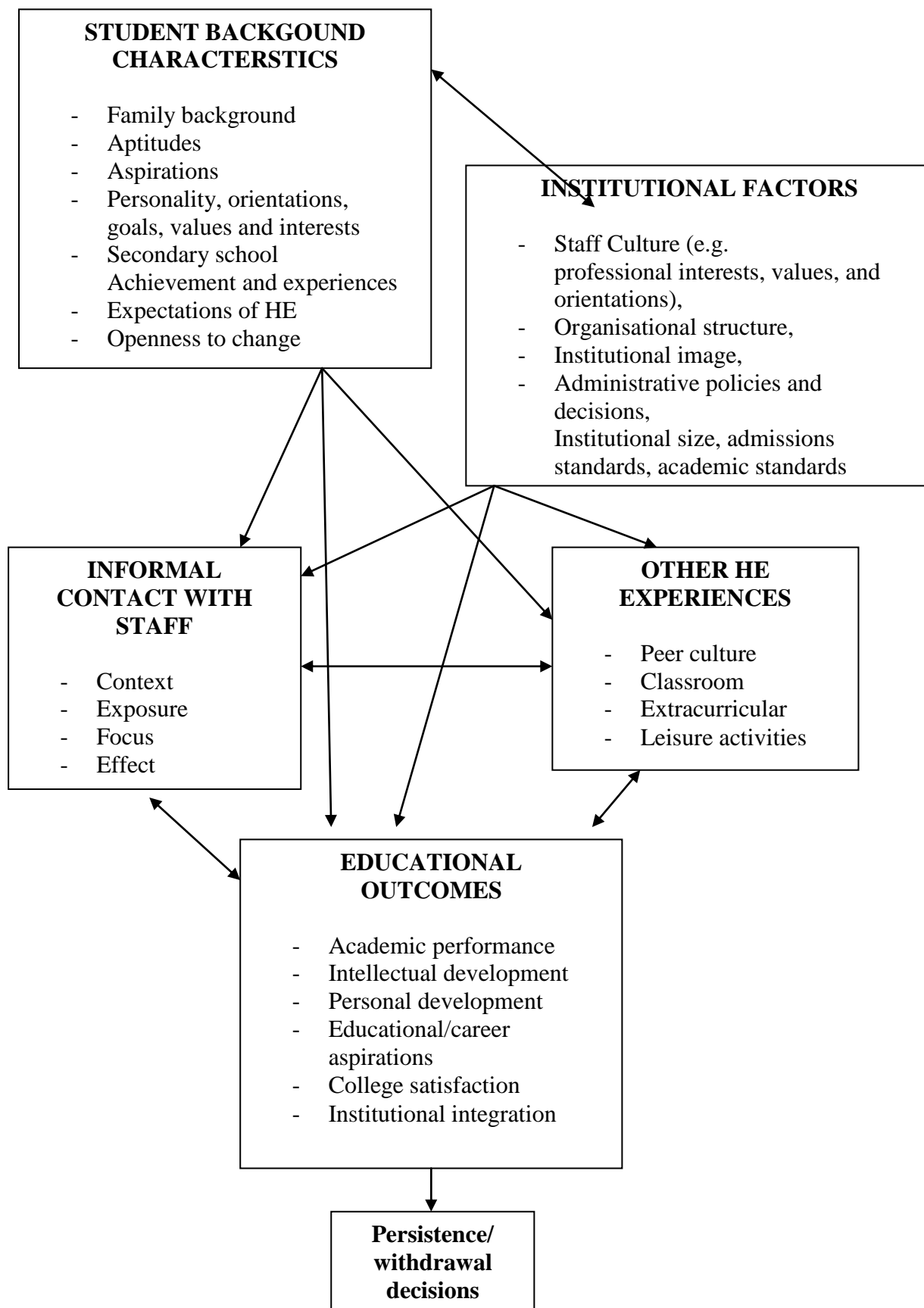


Figure 10. Pascarella & Terenzini's (1980) attrition theory. Adapted from Pascarella & Terenzini (1980, p. 569).

2.2.10 Reason, Terenzini, and Domingo's comprehensive model of influences on student learning and persistence. Reason et al., (2005) built on the work of Pascarella and Terenzini (1980) in their comprehensive model of influences on student learning and persistence (see Figure 11). Reason et al. (2005) aimed to explore a broad range of factors influencing student success, especially in the first academic year (Geng & Midford, 2015; Naidoo & Lemmens, 2015). They hypothesised that students come to HE institutions with a range of demographic, personal, and academic attributes and experiences that influence students' engagement or involvement in the HE institution. In turn, the levels of involvement are shaped by academic and non-academic experiences and conditions. A fourth domain, namely the institutional context, serves as the context in which all of the above dynamics occur. Reason et al. (2005) were of the opinion that the more actively students are involved in the academic and non-academic experiences of the HE institution, the more growth they will experience (Michel, 2016).

As stated above, the first component that Reason et al. (2005) indicated is the pre-enrolment characteristics and experiences of students. These include aspects such as students' socio-demographic traits, their abilities, and experiences in high school. According to Reason et al. (2005), students' pre-enrolment characteristics will shape students' engagement or involvement in various aspects of the HE institution. Involvement or engagement levels are also shaped by the different curricular, classroom, and out-of-class experiences that students have. Curricular experiences include aspects such as the modules and degrees for which students are enrolled, while classroom experiences encompass aspects such as the pedagogical approaches that are used and the behaviours of lecturers. Out-of-class experiences indicate the extent to which students make use of the learning opportunities that the HE institutions offer outside of classrooms.

Another important aspect of this model is the organisational context that students enter upon enrolment. This includes features such as organisational structures, policies and practices, and the faculty culture (Reason et al., 2005). Reason et al. (2005) were of the opinion that the more students engage in HE experiences, the more they will grow and the more likely they will develop academic competence. In turn, this will increase the probability of persistence.

Reason et al. (2005) indicated that information from only two sectors of American HE (small private liberal arts colleges, and comprehensive public universities) was utilised to inform their model and that the model should be generalised to other institutions with caution.

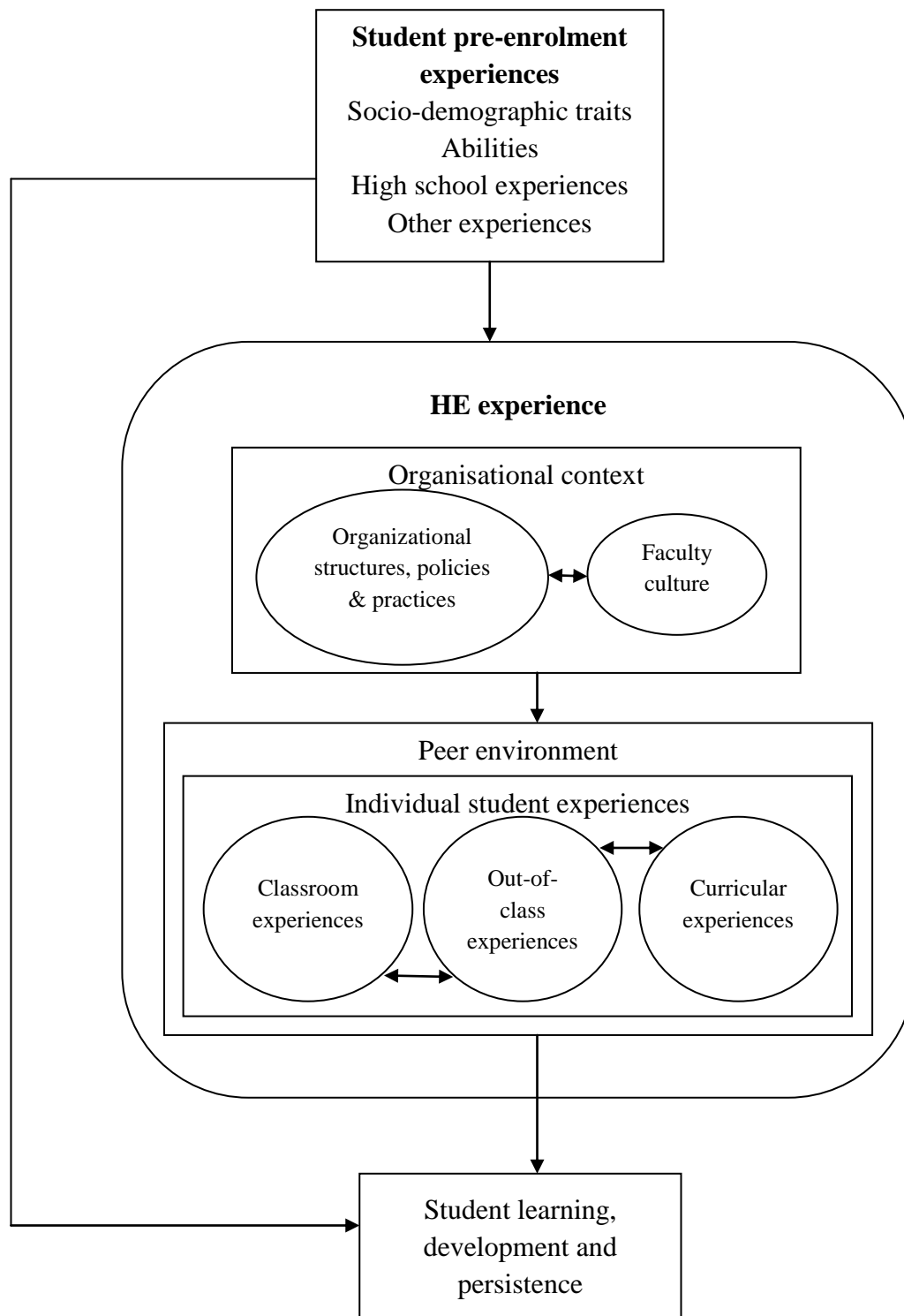


Figure 11. Reason, Terenzini, and Domingo's (2005) comprehensive model of influences on student learning and persistence. Adapted from Reason et al. (2005, p. 154).

2.2.11 Kuh et al.'s framework for student success. Kuh et al. (2006) proposed a framework for student success (as presented in Figure 12) in which they aim to integrate important theories in explaining student success. Kuh et al. (2006) argued that student success indicators must be broadened to include aspects relevant to different types of students, including adult, lifelong, and special students. They also viewed underprepared students as special students (Michel, 2016).

Firstly, the pre-enrolment factors of students are taken into account. These include secondary school experiences, family background and support, financial aid, demographics, enrolment choices, motivation, and academic preparation and skills. The pre-enrolment factors affect the chances that students will do what is necessary to succeed in HE.

Secondly, the transitions with which students must cope successfully are regarded as important. These include tutor and facilitation classes that must be attended to acquire academic skills, financial aid policies that could facilitate or obstruct enrolment, and working off campus, which could lower engagement with the HE system (Kuh et al., 2006).

Thirdly, the HE experience itself includes two facets, namely student behaviours and institutional conditions. Student behaviours include the time students spend on academic activities, interaction with lecturers and other staff, motivation, and peer interactions. Institutional conditions comprise the first-year experience, academic support, campus environment, peer support, resources, educational policies, programmes and practices, and structural features. In this model, Kuh et al. (2006) proposed that high levels of student-staff contact, as well as active and collaborative learning that is supported by inclusive and supportive institutional environments, are related to student satisfaction and persistence (Jensen & Jetten, 2015; Pascarella, 2001; Pascarella & Terenzini, 2005).

According to Kuh et al. (2006), an important element of student success, namely student engagement, is present at the meeting point between student behaviour and institutional conditions. Engagement is identified by student-staff interaction, active and collaborative learning, high expectations, and motivation. All the elements relate to persistence, educational attainment, and student satisfaction leading to student success (Das, 2009; Korobova & Starobin, 2015).

Next, Kuh et al. (2006) also considered the desired outcomes and post-tertiary indicators of student success. These include the performance of students, the learning and

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gains that they have undergone during their HE experience, and ultimately, their graduation from the HE institution. Furthermore, HE institutions should aim to prepare and motivate students for lifelong learning and employment.

Finally, contextual aspects are also considered. Students' HE experience will be influenced by economic forces, globalism, and the educational policies of the country. Additionally, the demographics, policies, and accountability of the HE institution will also affect students' experiences.

Kuh et al. (2006) acknowledged that, although their model encompasses various aspects and processes related to student success, many questions regarding success remain unanswered.

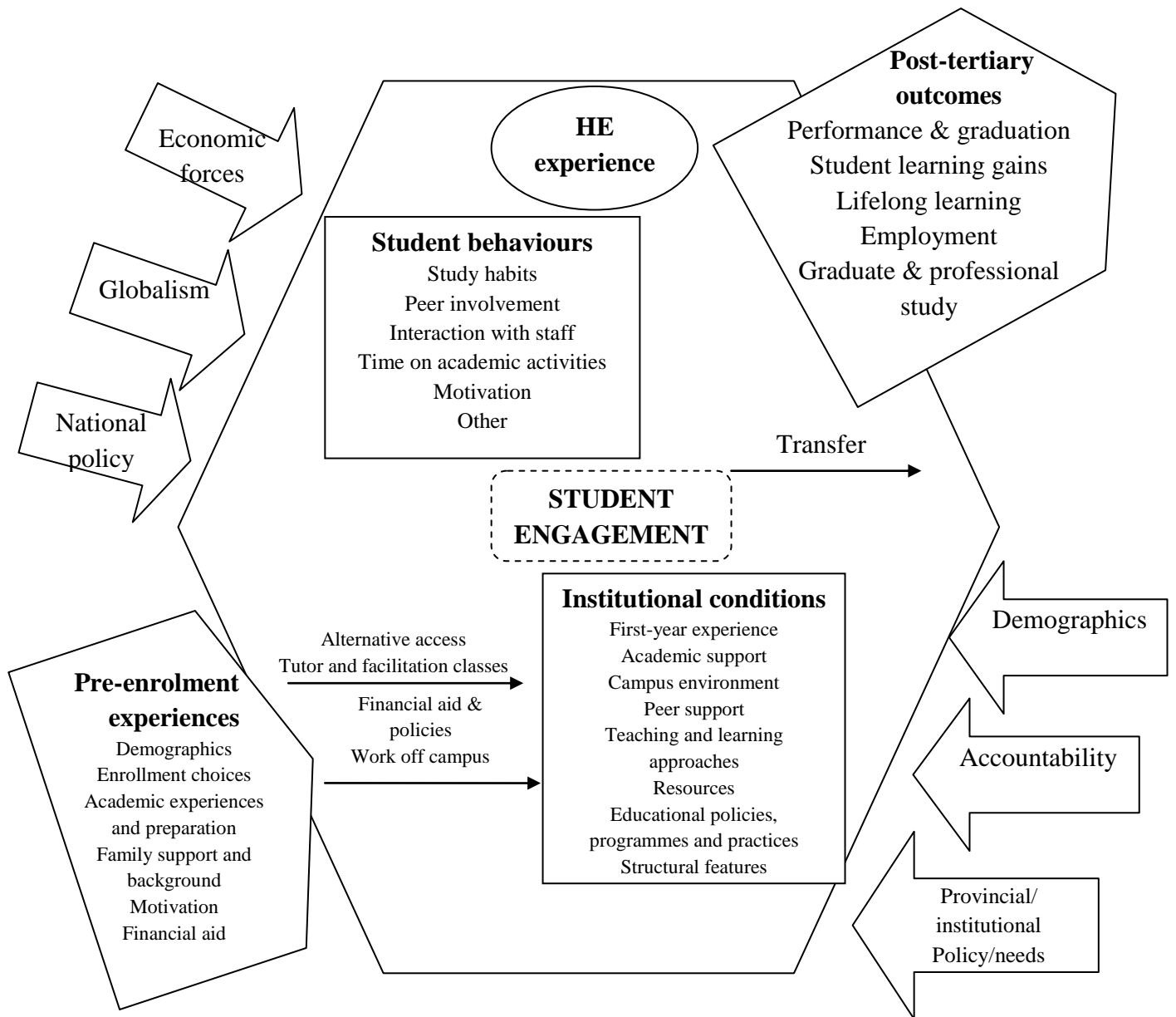


Figure 12. Kuh et al.'s (2006) framework for student success. Adapted from Kuh et al. (2006, p. 11).

2.2.12 Ogude, Kilfoil, and Du Plessis's student academic development and excellence model. In SA, various researchers have been investigating student success (Ogude et al., 2012; Potgieter, 2010). The focus of many research studies has been on how key factors in the external environment severely affect the approaches HE institutions in SA must adopt to bridge the gap from school to HE. These factors include aspects such as poor schooling for the majority of prospective students, an undifferentiated HE system, and the yet to be established predictive validity of the new National Senior Certificate examinations for HE study (Collier-Reed, Wolmarans, & Smit, 2010; Scott et al., 2007). Moreover, the bridging of this gap must be achieved in the midst of multiple institutional demands, an environment with limited resources, as well as an academic environment in which under-preparedness affects the majority of students in undergraduate programmes (Ogude et al., 2012).

Faced with these challenges, Ogude et al. (2012) aimed to develop a model that would enable the strategic management of student success, enhance the quality of the undergraduate experience, and improve performance indicators (as presented in Figure 13). Although the focus of their research was not on academic success per se, but rather on institutional strategies to address the challenges that South African HE institutions face, their work is still relevant to this study.

Ogude et al. (2012) focussed on finding solutions for four identified problem areas. The first problem Ogude et al. (2012) aimed to solve was the lack of a systemic approach to the first-year experience and student success. The researchers found a developmental research paradigm with the following five principles to be the most successful: endorsement at the highest level (support from the government), institution-wide involvement (participation from all sectors of the HE institution), a data-driven approach (making use of data gathered from different sectors of the HE institution), implementation and assessment of initiatives (putting initiatives into action and evaluating their effect), and continuous improvement of interventions (after evaluating the effect of interventions, improvements can be implemented). The first two principles were addressed successfully by making use of developmental research, and the last three principles were addressed through a systems approach at the specific institution. This systems approach includes an input dimension (identifies the resources or organisational input required to implement the institutional programme), a process dimension (identifies the locus of the interventions), an output dimension (desired results in the short term), an impact dimension (intended or unintended changes determined by case studies and surveys), and lastly, an outcome dimension (changes in participants'

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behaviour, knowledge, skills, and level of functioning in the long term) (Charlton & Andras, 2003). Ogude et al. (2012) were of the opinion that these five dimensions would provide a structure for sustained and systemic intervention.

The second problem area is the location of initiatives in peripheral units. Ogude et al. (2012) proposed that student success initiatives should address the entire student HE cycle, from registration to graduation.

Thirdly, stand-alone initiatives that are not linked to academic disciplines, as well as a lack of participation by academic staff, prove to be problematic. Ogude et al. (2012) recommended that academic disciplines and specific modules should be used as the focus of student success initiatives. They suggest that more focus should be placed on problem modules than on problem students and to design interventions for these modules that include all students that are registered for the module. This is in line with the views of Fanghanel (2007), as well as Marshal, Adams, Cameron, and Sullivan (2000) that institutions should provide a scope for departments to adapt institutional policies regarding academic success interventions. With regard to the involvement of academic staff in student success interventions, Ogude et al. (2012) advised that attention be paid to the improvement of curricula, pedagogy, and methods of assessment.

Lastly, Ogude et al. (2012) were concerned about the exclusive focus on the retention of limited student subgroups instead of focusing on the retention rates of diverse student populations. The authors point to the need for an institutional, student- and staff-focussed organisational approach. This corresponds with what Tinto (2006) suggested, namely a model of institutional action that presents strategies for the development of programmes and policies, but that also connect these institutional policies to practices for students and staff.

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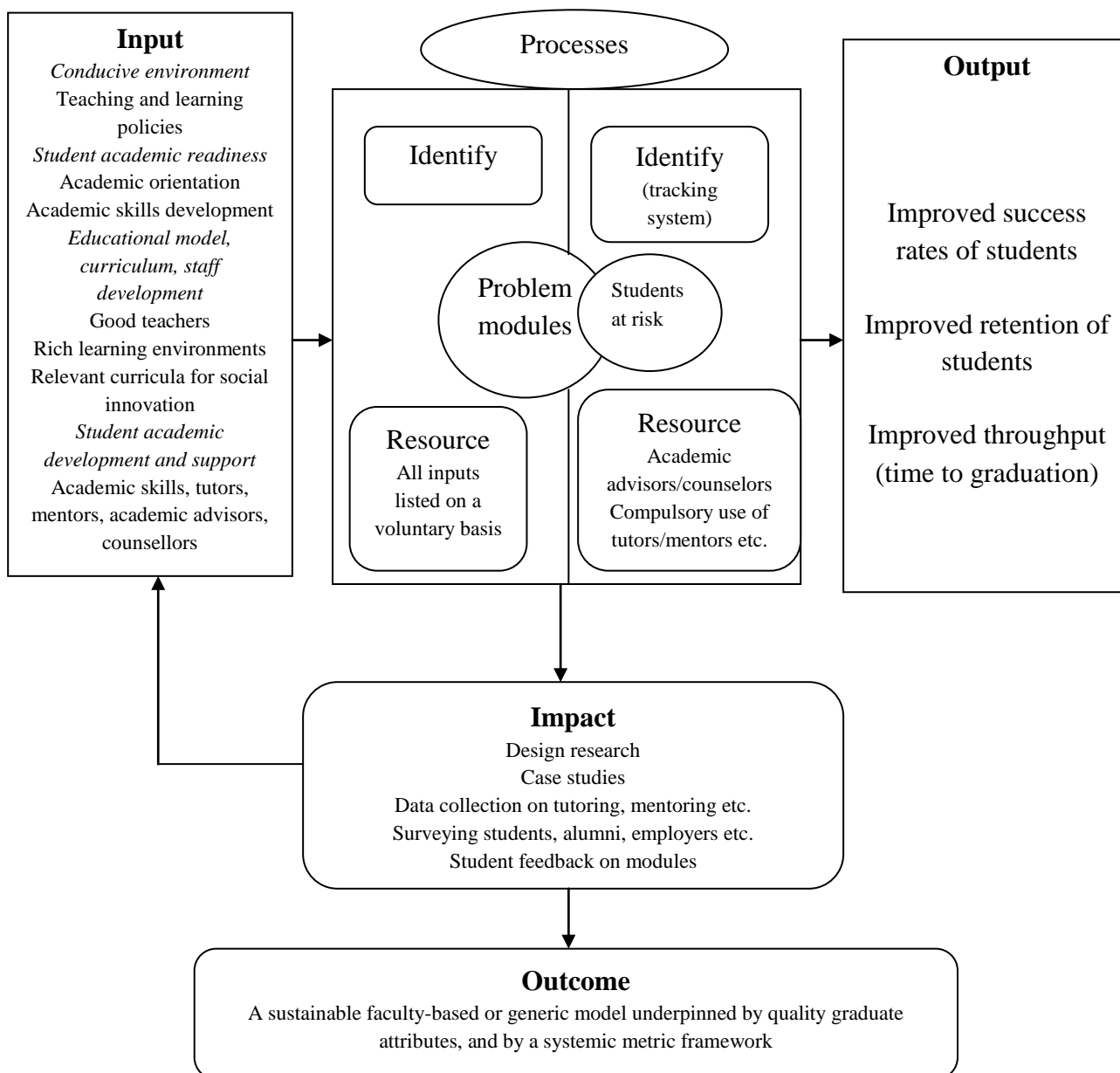


Figure 13. Ogude et al.'s (2012) student academic development and excellence model. Adapted from Ogude et al. (2012, p. 29).

The first dimension of Ogude et al.'s (2012) model is the input dimension. This dimension includes three sublevels that would ultimately improve student readiness, namely institutional, faculty, and student readiness interventions. Examples of interventions in this dimension are teaching and learning policies, students' academic skills development, and enriched learning environments.

The second dimension of the model is the implementation or process dimension. In this ongoing and dynamic process, the focus is first on identifying problem modules and employing resources to improve the possibility for academic success. Secondly, by making use of a tracking system, students at risk are identified and resources, including academic advisors, tutors and counsellors, are utilised to improve students' chances of success. The effect of interventions is reviewed continually by taking feedback from students and staff into account. Information gathered through the feedback sessions are used to formulate changes, if necessary.

The third and last dimension of the model is the output dimension whereby the results of all interventions are visible in the improved success rates of students. Success rates are indicated by improved retention and throughput rates of students.

Ogude et al. (2012) pointed out several limitations of this model. Firstly, the model was designed for a specific university, and more research will be required before the model can be implemented in different contexts. Secondly, the model is still evolving, and more work is needed to redefine certain aspects of the model. Lastly, the authors express a need for cohort studies in which the initiatives of this model are tracked systematically.

2.2.13 Strydom and Mentz's student engagement approach. Strydom and Mentz (2010) built on the work of Kuh et al. (2006) and focussed on student engagement as one of the key elements in student success in the SA context (see Figure 14 for a conceptualisation of their approach). Strydom and Mentz (2010) asked the questions of how success rates at South African HE institutions can be improved, how institutions can assist students coming to HE from inadequate school systems, and how HE institutions can make provision for students from diverse backgrounds with diverse life experiences.

Kuh, Kinzie, Schuh, Whitt, and associates (2005), Pascarella and Terenzini (2005), and Strydom and Mentz (2010) indicated that more than a decade of research points to academic preparation, motivation, and student engagement as being the three best predictors

of academic success. Pascarella and Terenzini (2005) and Strydom and Mentz (2010) were of the opinion that, regrettably, the only possible way to control academic preparation and motivation is to employ more rigid admission or selection criteria. They proposed that this is not a viable alternative in a century where, internationally, but also in SA, increased access to HE institutions for students from diverse backgrounds is paramount.

They suggested that by focusing on engagement, institutions are offered the opportunity to enhance the prospects for a diverse range of students to be successful in HE (Perry & Perry, 2015). Letseka et al. (2010) and Strydom and Mentz (2010) stated that student engagement represents a multi-faceted approach to understanding students. This approach focuses on student behaviours and institutional conditions (Madhav, Joseph, & Twala, 2015). These two elements are connected closely because the way in which institutions invest resources and design learning environments will channel student efforts into the correct types of activities. Research on student engagement enables institutions to create an environment that is more supportive for students and that can lead to improved retention and success.

Strydom and Mentz (2010) defined student engagement in terms of two key components: firstly, what students do (the time and energy they devote to educationally purposive activities), and secondly, what institutions do (the extent to which institutions employ effective educational practices to encourage students to do the right things). Strydom and Mentz (2010) attempted to apply the institutional conditions and aspects (benchmarks) that are conducive to academic success to the SA context. Originally, Kuh et al. (2005) developed these benchmarks for HE institutions in the USA. The benchmarks are described as broad, abstract categories that represent important student behaviours and institutional factors that are associated with several desired HE success outcomes. Institutions can use benchmarks to assess the occurrence of effective educational practices and to estimate the effectiveness of their efforts (Kuh et al., 2005; Strydom & Mentz, 2010). The five benchmarks for successful educational practices comprise the level of academic challenge, active and collaborative learning, student-staff interaction, enriching educational experiences, and a supportive campus environment. Strydom and Mentz (2010) propose that these can be used to improve the positive outcome of HE, such as higher throughput and success rates.

The first benchmark, level of academic challenge, is defined as the extent to which students find their academic work challenging and creative. This benchmark is important because being academically challenged is regarded as a central aspect in student learning and

development. Secondly, active and collaborative learning could be defined as the degree of students' involvement in their own learning processes. Students could be expected to learn more and be more successful if they are strongly involved in their own learning and if it is expected of them to reflect on their own learning processes.

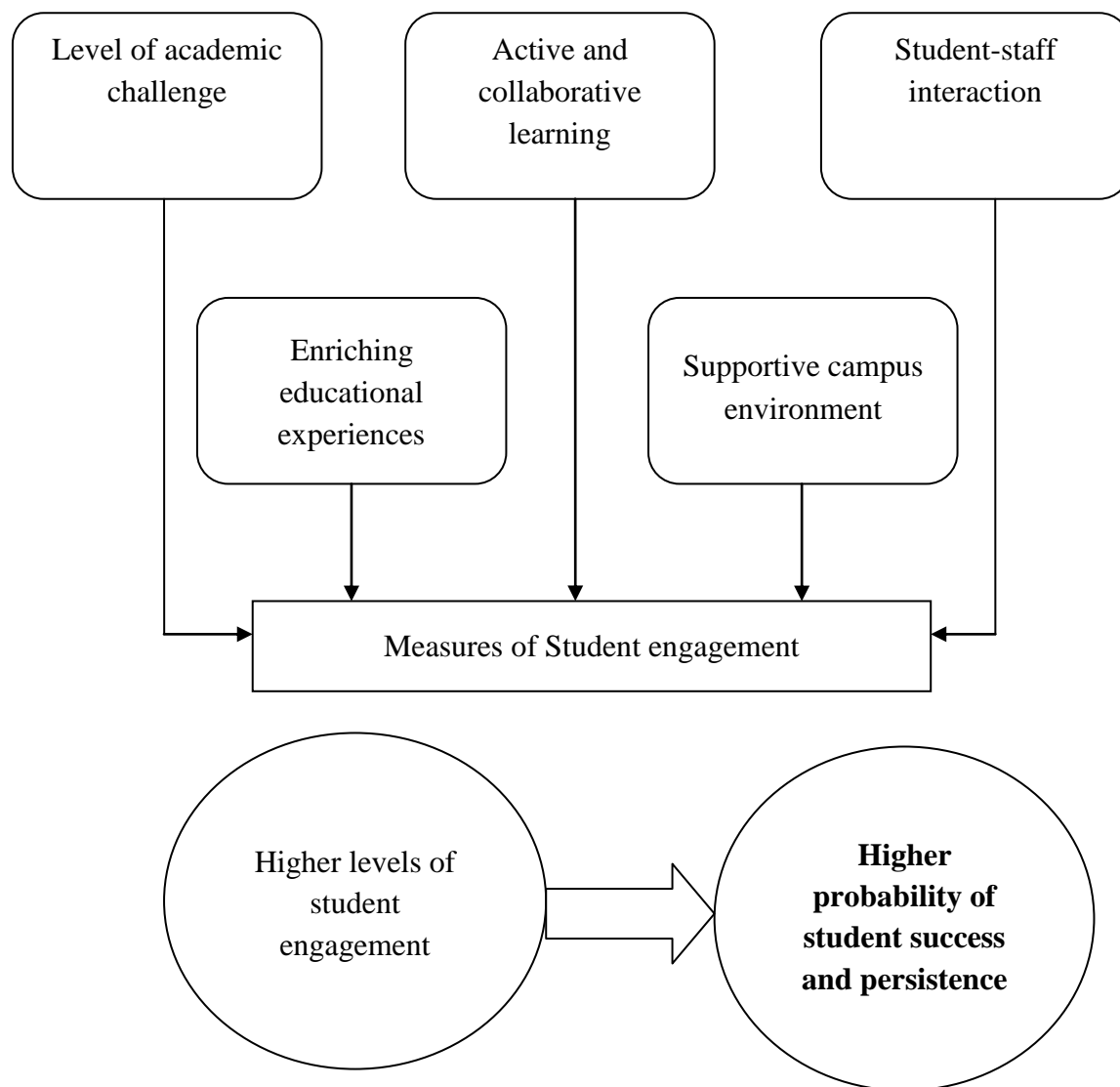


Figure 14. A conceptualisation of Strydom and Mentz's (2010) student engagement approach. Adapted from Strydom and Mentz (2010, pp. 1-41).

The third benchmark, student-staff interaction, is described as the amount of contact students have with staff members inside and outside the classroom. By interacting with staff members in different contexts, students learn from experts how to solve problems, and the probability of success is improved. Fourthly, enriching educational experiences is defined as the number of complementary learning opportunities in which students are involved. Learning

activities external to students' academic curricula will complement their academic curricula and enhance learning. Lastly, supportive campus environment could be described as students' experience of their campus environment and relationships with peers and staff members. The more supportive students experience the HE environment and the better the quality of relationships with staff and peers, the more engaged students could be expected to be (Kuh et al., 2005; Strydom & Mentz, 2010).

All these practices will lead to better student engagement, which in turn will bring about higher levels of student success (Strydom & Mentz, 2010). Student engagement is empirically linked to student success in HE (Kuh et al., 2005, 2007; Pascarella & Terenzini, 2005). Higher student engagement levels are associated with higher academic marks in assessment tasks, higher persistence rates among students, and improved graduation rates. Furthermore, research at the Indiana University Centre for Postsecondary Research indicated that higher levels of engagement are linked with academic success for all students, especially for historically disadvantaged students, regardless of their pre-enrolment experiences, academic preparation, and motivation (Kuh et al., 2007; Strydom & Mentz, 2010; Theron, 2015).

In terms of the relationship between the benchmarks for engagement and academic success, studies indicate that higher scores on four of the five benchmarks (only excluding enriching educational experiences) correlate significantly with the academic success of students. Furthermore, in the case of students at risk, high-quality relationships on campus, a supportive campus environment, interaction with staff, and increased reading and writing proved to be beneficial in the academic success of students (Strydom & Mentz, 2010).

Although data gathered through their research is valuable to HE institutions, continued longitudinal research is necessary to make an analysis of trends and interventions possible at systemic, inter-institutional, and intra-institutional levels (Strydom & Mentz, 2010). At a systemic level, data could contribute to help support HE institutions in planning, funding, and quality initiatives. On an inter-institutional level, information could be shared between different institutions with the potential to stimulate constructive conversations regarding student success. Finally, on an intra-institutional level, institutions will be able to evaluate the success of interventions aimed at student engagement and success.

2.2.14 Wilson-Strydom's student readiness perspective. Wilson-Strydom's (2010) focus was on the preparedness of students entering HE institutions as a valuable contributor to academic success. She drew on the work of Conley (2005, 2007, 2008, 2015) and his multidimensional model of college readiness to focus on how students experience the transition from school to HE, and their readiness for the demands of HE (see Figure 15).

Conley (2005, 2007, 2008) attempted to provide an alternative way of understanding, defining and measuring readiness for HE. Conley (2008) argues that a fundamental difference exists between students that meet the requirements to be admitted to HE institutions and students that are ready for the challenges of HE. In his model, Conley (2008) referred to four aspects that are needed for students to be ready for HE and to be able to meet the demands of the HE system successfully. Firstly, the development of key cognitive and meta-cognitive strategies is at the heart of readiness for HE. This includes the ability to formulate and solve problems, reasoning and argumentation skills, interpretation abilities, precision and accuracy, and the ability to inquire and have meaningful dialogues with regard to research. The second aspect of great importance is content knowledge. Although academic writing skills have been identified as one of the most important academic skills associated with success, content knowledge in other areas are also regarded as important. Thirdly, academic behaviours are regarded as an important contributing factor in students' academic success. This can be described as behaviours that reflect students' self-awareness, self-control, self-monitoring, and actions that are necessary for obtaining academic success. Examples of academic behaviours include time management and effective study skills. Finally, contextual knowledge and skills of students are considered to be important in their readiness and ultimately in their academic success. This aspect relates to students' understanding of how the HE system works and what is expected of them, knowing what to study, and how to apply to an HE institution. Conley (2008) stated that students' success will be enhanced if they possess contextual knowledge and skills. He indicated that, especially first-generation students could be at a disadvantage in terms of contextual knowledge and skills (Naidoo & Lemmens, 2015).

Wilson-Strydom (2010, 2015) aimed to explore how Conley's (2005, 2007, 2008) multidimensional model applied to students in the SA context and how SA students made sense of their HE experience. Wilson-Strydom (2010, 2015) found that the transition from school to HE was difficult for almost all the students participating in her study. She stated that the experiences reported by SA students were in line with Conley's (2005, 2007, 2008) multidimensional model of university readiness. Furthermore, in terms of contextual

Factors and experiences related to academic success

knowledge and skills, an additional component related to diversity encounters among students also emerged. In the SA context, all four facets described by Conley (2005, 2007, 2008) were found to be valid, while the aspects of academic behaviours and contextual knowledge and skills appeared to present the greatest challenge to students.

Wilson-Strydom (2010, 2015) was of the opinion that Conley's (2005, 2007, 2008) multidimensional model of student readiness provides a useful framework for understanding readiness for HE in SA. She further stated that, although the model was tested within an interpretive framework at one South African HE institution, it is likely that her findings could be relevant to other HE institutions because research and anecdotal evidence indicate that first-year students in a range of contexts struggle to bridge the gap from school to HE successfully.

Baber, Castro, and Bragg (2010) were of the opinion that, although this framework enhances the understanding of aspects important for student success, it does not place adequate emphasis on the varied cultural references and experiences held by diverse student populations.

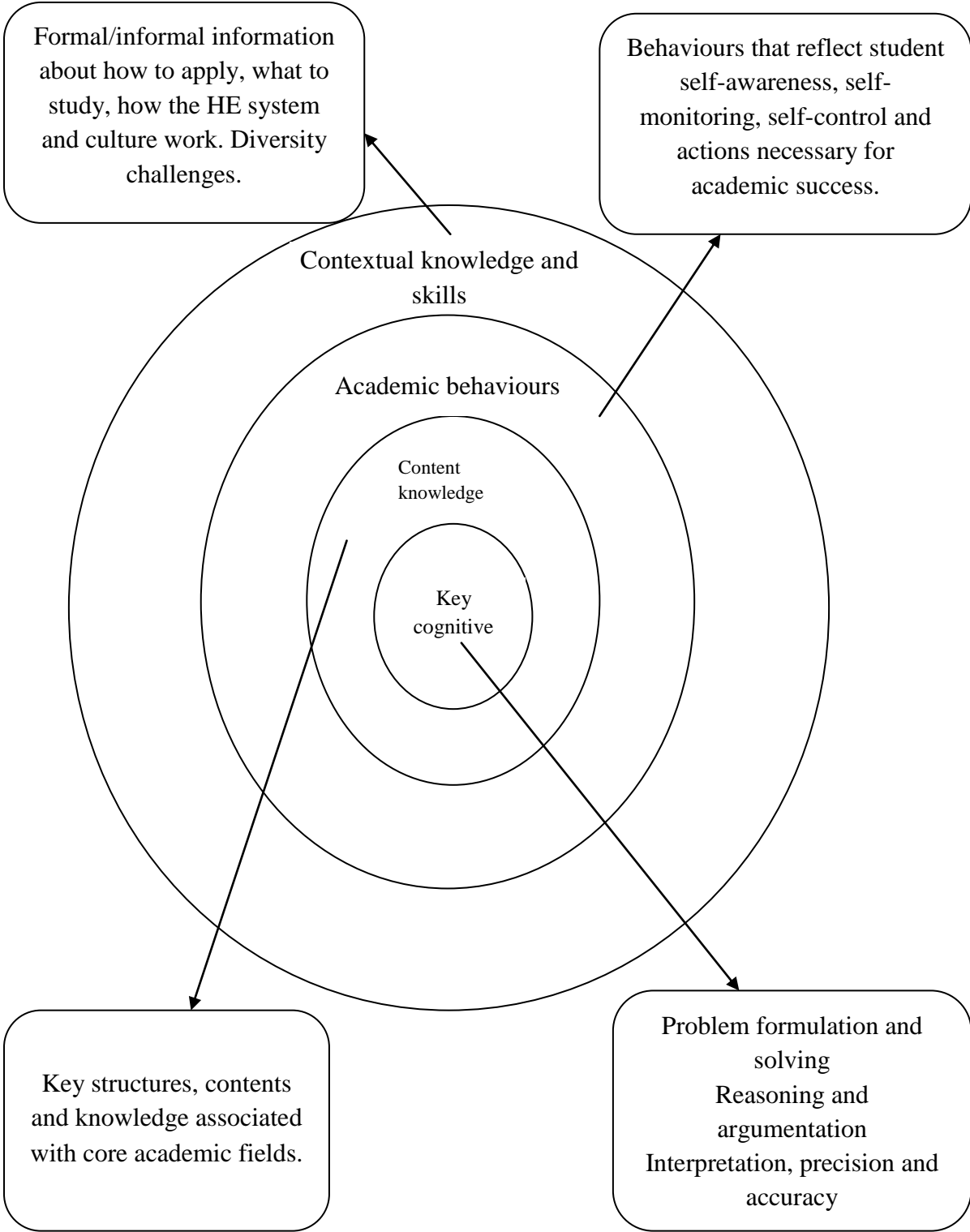


Figure 15. Wilson-Strydom's (2010) student readiness model. Adapted from Wilson-Strydom (2010, p. 316).

2.2.15 Jama, Mapesela and Beyleveld's retention theory for non-traditional students. Jama et al. (2008) utilised the work of Bean and Metzner (1985), Spady (1970) and Tinto (1975) to formulate their theory of retention for non-traditional students in SA. Jama et al. (2008) indicated that, although these theories seem to offer a broad understanding of student retention and success, they fail to address the complex realities of non-traditional students fully, especially in the SA context. In addition, these theories do not address the effect of language on the academic success of non-traditional students. While English has been the language of instruction in South African HE institutions and schools for many years, most non-traditional students have not fully acquired the necessary English language proficiency skills. According to Jama et al. (2008), language proficiency may therefore be seen as a very important contributor to the academic success of non-traditional students.

Jama et al. (2008) proposed four stages or circles of progression for non-traditional students as they move from one stage in their academic career to another (see Figure 16). These stages comprise students' academic progression prior to entry into HE, initial entry into HE, progression into the actual learning and teaching experience, and the ongoing social and academic integration with the HE system. This theory also includes two other aspects that are of particular importance to non-traditional students, namely finances and language proficiency (Winfield & Luyt, 2013).

According to Jama et al. (2008), non-traditional students' academic paths will begin before they enter the HE system (pre-entry). Many non-traditional students will find themselves within a family background with limited resources and support to assist them with their integration with HE. Furthermore, it is likely that the school system from which non-traditional students come did not equip them with the academic and language skills necessary for success in HE (Berge & Huang, 2004). Lastly, in this stage, the financial difficulties that non-traditional students may experience often begin to appear.

Jama et al. (2008) indicated that the second stage (initial entry) is a critical phase in success. In this stage, students will enter the HE system for the first time. In terms of social integration, students are expected to cope with a new environment and with new people from different backgrounds. Some non-traditional students are separated from their families for the first time and have never been independent. During this stage, students should also start making new friends and when failing to do so, may feel alienated (Strahan, 2003). When considering academic integration, students come into contact with the academic structures,

language, and academic organisation of the HE institution for the first time. Lastly, during this stage, financial difficulties begin to take their toll when students realise that the loans and bursaries they have received are not enough to cover all their costs.

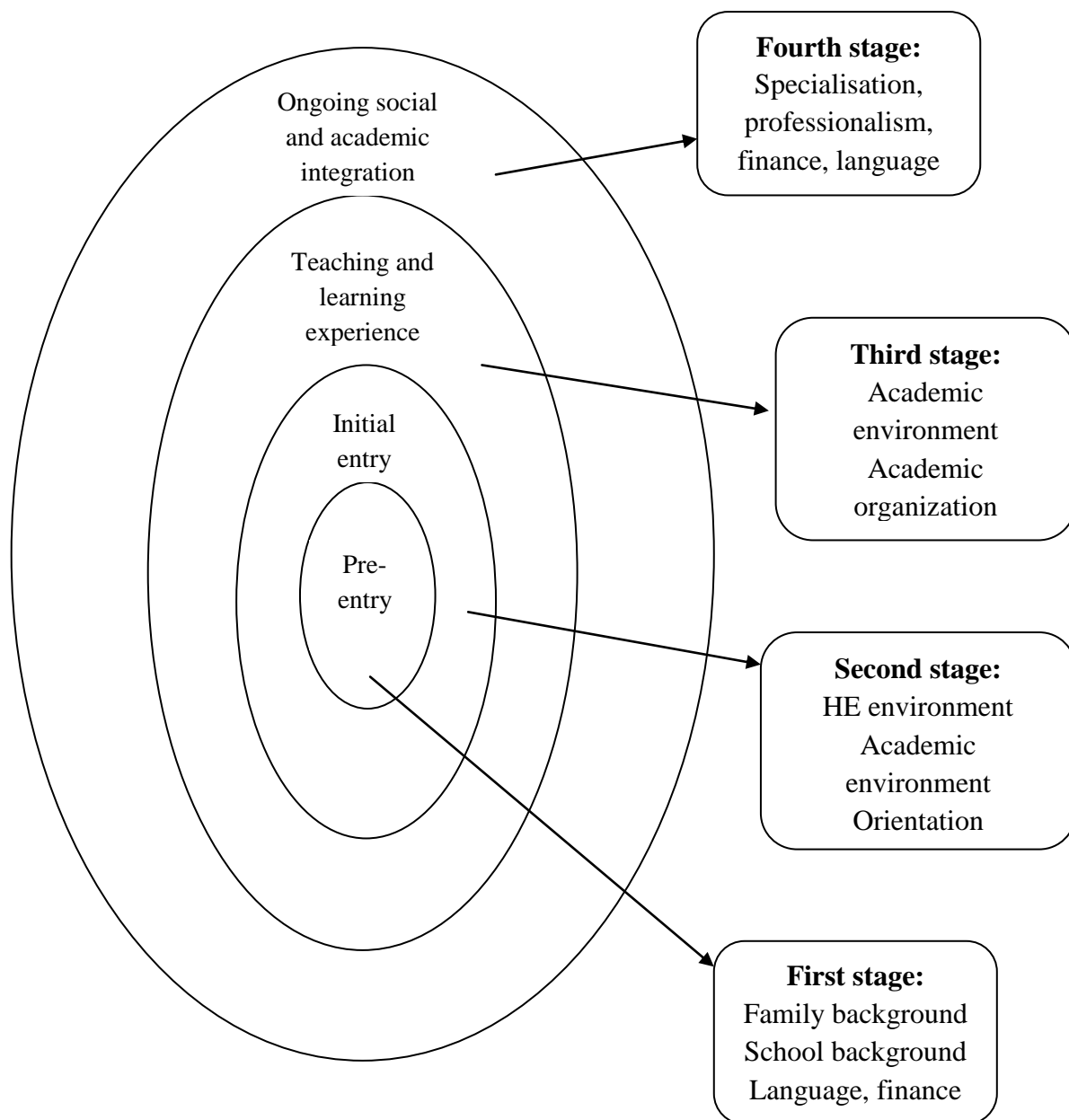


Figure 16. Jama et al.'s (2008) student retention model. Adapted from Jama et al. (2008, p. 999)

During the third stage (teaching and learning experience), students begin to learn about the realities of the HE experience. In addition to grasping subject-specific concepts, students have to learn the new language of teaching and learning (Jama et al., 2008). Moreover, students have to become acquainted with classroom arrangements, study materials, lecturers, and peers from different cultures. If financial problems were not solved in the previous stage, it will continue to affect student success. Obtaining academic success is the most important factor in moving to the next stage (Jama et al., 2008).

In the fourth and last stage (ongoing social and academic integration), students begin to specialise in a specific learning programme. In this stage, students become more prepared for their roles as professionals in a specific field. They are expected to apply the skills that were acquired in the previous stages and have a better grasp of academic language proficiency, as well as critical thinking skills. In this stage, academic integration is regarded as more important than social integration, although social integration still affects success (Jama et al., 2008).

Jama et al. (2008) were of the opinion that their theory on retention provides a holistic understanding of the challenges that non-traditional students face in a South African context. Although their theory was developed at a single HE institution, they postulate that other HE institutions can benefit from information set out in their theory.

2.2.16 Summary of theoretical perspectives. Some of the most widely tested theories of student retention and success, including psychological perspectives (Astin, 1984; Braxton et al., 2004; Kuh et al., 2006; Wilson-Strydom, 2010), sociological perspectives (Spady, 1970; Tinto, 1975), organisational perspectives (Bean & Metzner, 1985; Kuh et al., 2006; Strydom & Mentz, 2010), cultural perspectives (Bourdieu, 1977, 1984, 1986), and economic perspectives (Braxton et al., 2004; Cabrera et al., 1992; Jama et al., 2008; Reason et al., 2005) were discussed. Traditional theories that were discussed, include Spady's (1970) theory of student departure, Tinto's (1975) student integration theory, Astin's (1984) student involvement theory, Bean and Metzner's (1985) student attrition theory, Pascarella and Terenzini's (1980) attrition theory, and Bourdieu's (1977, 1984, 1986) cultural capital theory. More recent theories and models pertaining to student success that were discussed above include Kuh et al.'s (2006) framework for success, Carbrera et al.'s (1992) integrated model of student retention, Braxton et al.'s (2004) theory of student departure, Berger and Milem's (1997) behaviour-perception-behaviour cycle model, and Reason et al.'s (2005)

comprehensive model of influences on student learning and persistence. Lastly, SA models and theories that were included in the discussion are Ogude et al.'s (2012) student academic and excellence model, Strydom and Mentz's (2010) student engagement approach, Wilson-Strydom's (2010) student readiness perspective, and Jama et al.'s (2008) retention theory for non-traditional students. In the discussion that follows, some general trends and unique foci of the various theories are highlighted.

In nearly all the theories and models that were presented, the effect of students' pre-enrolment attributes or entry characteristics in the retention process were included. However, the various researchers placed different emphasis on the importance of pre-enrolment factors and the interactions of pre-enrolment attributes with other factors. Bean and Metzner (1985), Berger and Milem (1999), Braxton et al. (2004), Jama et al. (2008), Kuh et al. (2006), Pascarella and Terenzini (1980), Reason et al. (2005), and Tinto (1975) all agreed that students' pre-enrolment factors are the first aspect to be considered and that it will influence all the subsequent aspects in the process of student success and persistence either directly or indirectly. Pre-enrolment factors that are included by these researchers are family background, parental education and support, demographic information, residential status, previous school performance and school experiences, ethnicity, gender, age, financial resources, motivation and language proficiency. Tinto (1975) categorised these aspects into three broad categories (family background, individual attributes, and previous academic experiences), while most of the other researchers grouped all of the attributes together in one overarching category. Jama et al. (2008) included most of the attributes above, but emphasised the importance of students' language proficiency and financial situation. On the other hand, Spady (1970) regarded students' family background as the initial factor in the process. He was of the opinion that students' family background will influence students' academic potential and normative congruence (interests, values, personality aspects, and dispositions) which will influence the rest of the process in turn. Although Bourdieu (1986) did not explicitly mention pre-enrolment factors, his notion that students' cultural capital is the result of parental influences implies that family influences are important in shaping students' skills and knowledge prior to entering HE. Astin (1984), Cabrera et al. (1992), Bourdieu (1986), Strydom and Mentz (2010) and Wilson-Strydom (2010) mentioned, but did not specify, students' pre-enrolment characteristics in their models. However, both Astin (1984) and Cabrera et al. (1992) acknowledged the importance of students' financial situation at the beginning of their HE career. Lastly, Wilson-Strydom (2010) recognised the importance of key cognitive, meta-

cognitive, and other academic skills and knowledge as pre-enrolment factors in students' success.

In several of the models and theories, the importance of integration, involvement, or interaction with the HE context is highlighted. Furthermore, for the most part, the value of both the academic and social spheres of HE is recognised. Tinto (1975) was the first to distinguish between the two distinct categories of academic integration (academic performance and intellectual development) and social integration (interactions with the peer-group, as well as with staff members) as contributors to academic success. Bean and Metzner (1985), Cabrera et al. (1992), and Jama et al. (2008), used Tinto's (1975) theory in their own models and have similar views regarding the importance of academic and social integration in student success. Spady (1970) also mentioned grade performance, intellectual development, and friendship support as contributors in students' social integration. Although Astin (1984) viewed student involvement as paramount in students' decisions to dropout, his focus is mostly on the academic involvement of students. Wilson-Strydom (2010) also acknowledged the importance of students' academic involvement and development in their consequent academic success. Braxton et al. (2004) included both social integration and academic integration, but view academic integration as the result of social integration and therefore do not regard them as reciprocal. On the other hand, Bean and Metzner (1985), Cabrera et al. (1992), Jama et al. (2008), and Tinto (1975) regarded academic and social integration as being on the same level, of equal importance, and reciprocal. While Berger and Milem (1999) and Pascarella and Terenzini (1980) also acknowledged the importance of academic and social integration, they view academic and social integration as the result of students' involvement with peers and staff, and the perceived support they obtain from peers and the HE institution throughout the year. Reason et al. (2005) stated that the more students engage in HE experiences (classroom experiences, out-of-class experiences, and curricular experiences) the more likely academic competence (integration) will develop. This differs from Bean and Metzner's (1985), Cabrera et al.'s (1992), Jama et al.'s (2008), and Tinto's (1975) opinions that academic integration and social integration are reciprocal in nature and too much of the one can lead to a deficit in the other. Kuh et al. (2006) and Strydom and Mentz (2010) focussed on the term *engagement*, which includes student behaviours (study habits, peer and staff involvement, motivation etc.), and on institutional conditions. Finally, Bourdieu (1986) indicated that, if students possess adequate cultural capital, interaction with academic and social spheres of the HE institution will be more successful. The importance of integration

and the reciprocal roles of both the student and the HE institution are highlighted in the discussion above.

Another aspect that several of the researchers point out as a contributor to success is students' commitment to the institution and their educational goals. However, once again, the interaction between other factors and the placement of commitment and goals in the process of persistence are different in the different models. Spady (1970) was of the opinion that commitment to the institution is the result of adequate social integration and satisfaction with the HE institution and that commitment to the institution directly affects students' decisions to drop out from HE. On the other hand, Berger and Milem (1999), Braxton et al. (2004), and Tinto (1975) distinguished between students' initial educational goals and commitment to the institution and their later goals and commitment. They postulate that initial commitment and goals will be altered by students' academic and social integration with the HE context and that subsequent goals and commitment will affect dropout decisions directly. Bean and Metzner (1985) and Pascarella and Terenzini (1980) classified students' educational goals and commitment to the institution as part of the broader category of psychological outcomes, which also include aspects such as students' satisfaction and stress levels. Cabrera et al. (1992) suggested that students' commitment to the institution and educational goals is the result of academic and social integration, as well as encouragement from friends and family, and that it will affect students' intent to persist directly, which in turn directly affects persistence. Conversely, many of the researchers did not specifically point to the importance of students' commitment to the institution and educational goals (Astin, 1984; Bourdieu, 1986; Jama et al., 2008; Kuh et al., 2006; Reason et al., 2005; Strydom & Mentz, 2010; Wilson-Strydom, 2010). When the different views are summarised, it seems that several of the researchers acknowledge that students' ultimate commitment to their educational goals and their commitment to the institution will be a result of their HE experiences, and that the later levels of commitment could be very different from initial commitment to their goals and the institution (Berger & Milem, 1999; Braxton et al., 2004; Cabrera et al., 1992; Tinto, 1975).

An additional aspect to consider is the different stages or transitions that students must undertake to be integrated successfully with the HE context. Tinto (1975) indicated three stages that he believes students should endure successfully, namely separation, transition, and incorporation. Jama et al. (2008) proposed four stages, namely pre-entry, initial entry, teaching and learning experience, and ongoing social and academic integration. They

postulated that students' academic paths begin before they enter HE, in their family context, and with the limited resources available to them. Jama et al.'s (2008) second and third stages are similar to Tinto's first and second stages where students must separate successfully from their family context and previous communities in order to become more comfortable with the HE environment. Finally, Jama et al.'s (2008) fourth stage corresponds with Tinto's (1975) third stage, in which students are more comfortable in the HE context.

While theories often focussed on the role of students in their own academic success, many of the researchers pointed to the relevance of aspects related to the HE institution itself as a contributor to student success. Tinto and Pusser (2006) focussed specifically on aspects in the HE institution's control that could promote student success, such as student support practices aimed at integrating students into the HE context, and feedback given to students. Astin (1984) drew attention to the effectiveness of educational policies as a contributor to student involvement and, consequently, to student persistence. Braxton et al. (2004) indicated the internal campus environment as a key contributor to students' social integration. Similarly, Milem and Berger (1997) included students' perceptions of institutional support as part of their behaviour-perception-behaviour cycle. Pascarella and Terenzini (1980) were of the opinion that institutional factors, like the organisational structure, size, staff culture, and policies, are direct contributors to students' educational outcomes, which in turn directly affect persistence. Lastly, Kuh et al. (2006), Ogude et al. (2012), Reason et al. (2005), and Strydom and Mentz (2010) all indicated the relevance of institutional aspects in students' success.

Moving beyond the HE environment, external factors (families, work environments, neighbourhoods, finances etc.) are also highlighted as an aspect that can affect student success. Although Tinto (1975) did not include this in his original theory, he adds external commitments as an additional contributor in the process of persistence in his revised model of 1993. He postulates that external commitments will have a direct effect on students' educational goals and commitment to the institution. Likewise, Bean and Metzner (1985) indicated the importance of external factors, or environmental variables as they termed it, in students' decisions to drop out. They show that non-traditional students' dropout decisions are affected directly by external factors. In their research at commuter HE institutions, Braxton et al. (2004) also pointed out the direct effect of the external environment on students' dropout decisions. Jama et al. (2008) indicated the relevance of external variables for non-traditional students in SA. Cabrera et al. (1992) regarded two factors, namely financial aspects and

encouragement from family and friends, as important. However, they are of the opinion that these aspects only have an indirect effect on persistence. Reason et al. (2005) also mentioned out-of-class experiences of students as an indirect contributor to persistence. Moreover, Kuh et al. (2006) agreed that external variables affect student success, if only indirectly. Thus, it would seem that, although the effect of external variables is indicated by several researchers, it is of greater importance for non-traditional students (Bean & Metzner, 1985; Braxton et al., 2004, Jama et al., 2008).

Lastly, a number of researchers call attention to aspects that have specific relevance for at-risk or non-traditional students. Bean and Metzner (1985) specifically focussed on the academic success of non-traditional students and found that various differences exist between the factors that are important for traditional students and those for non-traditional students. Bean and Metzner (1985) established that, while social integration is very important in traditional students' success, it is not as important as external environments in the case of non-traditional students. These external environmental factors include finances, employment, encouragement from family and friends, and family responsibilities. Braxton et al. (2004) agreed with these findings. Furthermore, Bean and Metzner (1985) found that psychological outcomes are of greater importance to non-traditional students than academic outcomes are. Once again, this differs vastly from what has been found in the case of traditional students, where academic integration and ultimately academic performance are main contributors in students' dropout decisions. Bourdieu (1986) indicated that students from lower socio-economic backgrounds lack cultural capital, which makes it more difficult for them to achieve academic success, as opposed to their counterparts from higher socio-economic backgrounds. In SA, cultural capital has been associated with first-generation students and the lack of English language proficiency (Boughey, 2002). Another aspect of specific relevance to students who are at risk is the informal contact between these students and staff. Frequent and quality informal contact with staff has been shown to be a compensatory factor among students with a high risk to dropout from HE (Pascarella & Terenzini, 1980). In addition, Strydom and Mentz (2010) also found contact with staff to be an essential factor in the success of students who are at risk. They added good relationships with peers on campus, a supportive campus environment, and increased reading and writing skills (which form part of language proficiency) as other vital aspects for students who are at risk. Lastly, Ogude et al. (2012) acknowledged the importance of contact between students and staff; however, they focussed on HE institutions' role in assisting students in reaching success. Firstly, Ogude et

al. (2012) pointed out that HE institutions should focus on all students (not only students who are at risk) and employ resources to enhance students' readiness at the beginning of students' HE careers. After student readiness interventions have been employed, problem modules and students who are at risk should be identified, and further resources should be utilised to aid students. Ogude et al. (2012) also highlighted the importance of continued feedback and evaluation of interventions.

In the discussion above, it is clear that, although all the various theories view student success from a slightly different perspective, similarities do exist. Most of the theories explain student success as a longitudinal, complex process that includes several factors. Furthermore, the majority of the theories described above are set in a causal pattern. However, Kuh et al. (2006), Pascarella and Terenzini (2005), Swail, Redd, and Perna (2003), as well as Tinto (2000) pointed out the fact that additional research is needed to gain better understanding of the aspects related to success in order to formulate a comprehensive theory of student success. Several researchers also state that the theories and models described above did not give enough consideration to non-traditional and previously disadvantaged students (Bean & Metzner, 1985; Jama et al., 2008; Strydom & Mentz, 2010; Wilson-Strydom, 2010). This aspect is especially important in the South African context, where the HE system still faces challenges after political reform in 1994 (Steyn et al., 2014). Several researchers pointed out that many white students in SA still perform better on an academic level than their peers from other race groups do, amongst others due to inequalities in the school system and the unequal distribution of resources (Griffin & Allen, 2006; Hannaway, 2012; Steyn, Harris, & Hartell, 2012; Van der Berg, 2008). All this point to the need for further research that can enhance understanding of academic success, especially in SA. An integrated model of student success for this study is proposed below.

2.2.17 Integrated model of success for this study. This section aims to conceptualise a model of academic success specific to this research study. As mentioned above, most of the theories and models on student success acknowledge the importance of the characteristics and efforts of students and institutions in fostering academic success (Astin, 1984; Bean & Metzner, 1985; Milem & Berger, 1997; Cabrera et al., 1992; Kuh et al, 2006; Ogude et al, 2012; Pascarella & Terenzini, 1980, Strydom & Mentz, 2010; Tinto, 1975). However, this study focuses on academic success from a student perspective; therefore, institutional characteristics and efforts will not form part of the summative model discussed below, although it might be implied in some of the factors.

In this integrated model of success, four stages of development that students will undergo during their HE experience are proposed, namely the pre-enrolment stage, the entry into HE stage, the HE experience stage, and the ongoing integration stage. This ties in with Jama et al.'s (2008) and Tinto's (1987 1993) stages of development or transitions that students must successfully negotiate to be successful in HE.

During the first stage (pre-enrolment stage), students' pre-enrolment characteristics are considered as important in the process of success and persistence. Several of the models and theories discussed above pointed out the importance of students' background or pre-enrolment characteristics in their academic success (Bean & Metzner, 1985; Berger & Milem, 1999; Cabrera et al., 1992; Jama et al., 2008; Kuh et al., 2006; Pascarella & Terenzini, 1980, Reason et al., 2005; Tinto, 1975). This model divides students' pre-enrolment variables into three categories, namely demographic attributes, previous academic experiences, and family background. In terms of students' demographic attributes, age, gender, and race/ethnicity are included. This corresponds with information from other researchers discussed above (Bean & Metzner, 1985; Berger & Milem, 1999; Cabrera et al., 1992; Jama et al., 2008; Kuh et al., 2006; Pascarella & Terenzini, 1980; Reason et al., 2005; Tinto, 1975). Previous academic experiences include students' Grade 12 performance, language proficiency, and high school attended. These aspects relate to Wilson-Strydom's (2010) notion of student readiness, and that students should have certain levels of knowledge and skills to be able to cope with the demands of HE. Language proficiency also links with Bourdieu's (1986) notion of cultural capital and Jama et al.'s (2008) emphasis on the importance of language proficiency, especially for students who are at risk in SA. Lastly, students' family background, as highlighted by Jama et al. (2008), Kuh et al. (2006), and Pascarella and Terenzini (1980), is represented by parental levels of education.

Throughout the second stage (entry into HE stage), students' initial commitment to the HE institution, their initial educational goals, their academic self-concept, the physical and psychological energy they devote to their HE careers, and the degree for which they have enrolled will determine how they interact with the HE environment. Several of the theories and models discussed above (Berger & Milem, 1999; Braxton et al., 2004; Cabrera et al., 1992; Tinto, 1975) highlight these aspects. Initial educational goals and commitment to the HE institution, as well as academic self-concept, will influence the manner in which students interact with the HE environment. For example, students who are more committed to their educational goals will more likely persist than students who are less committed will.

Likewise, students who are committed to a specific HE institution because that specific HE institution forms part of their long-term educational plans, will more likely persist than students who are not predisposed to a specific HE institution will. Since students' initial educational goals and commitment to the HE institution could be an indication of the psychological orientations with which students enter the HE context, it links closely with Astin's (1984) notion of student involvement. Thus, it can be hypothesised that the higher students' initial commitment to their educational goals and the institution is, the more physical energy (related to students' behaviours) and psychological energy (related to students' motivation) students will devote to their HE career, which in turn will influence the levels of social and academic integration that students will achieve in the next stage of the model. Furthermore, various researchers agree that the degree for which students are enrolled could affect their success and persistence (Daempfle, 2003; Leppel, 2001; Purdie, 2007).

In the next stage, (the HE experience), students' integration with the HE system in both the academic and social spheres is prominent. Although different terms are used to describe this process (integration, involvement, and engagement), most researchers highlight the academic and social behaviours and development of which this process consists (Astin, 1984, Bean & Metzner, 1985; Braxton et al., 2004; Cabrera et al., 1992; Kuh et al., 2006; Milem & Berger, 1997; Pascarella & Terenzini, 1980; Reason et al., 2005; Strydom & Mentz, 2010; Tinto, 1975; Wilson-Strydom, 2010). In this study, a distinction is made between academic integration (including class attendance, the time students spend on academic tasks, academic contact with staff and peers), and social integration (including non-academic or informal contact with staff and peers, living on or off campus, and participation in extracurricular activities). In addition to academic and social integration, external factors are included in this model as an important aspect related to students' integration with the HE context. It has been shown that this variable has particular relevance in the case of non-traditional students and students who are at risk (Bean & Metzner, 1985; Braxton et al., 2004; Cabrera et al., 1992; Jama et al., 2008). External factors included in this study are financial aspects, family responsibilities, and employment responsibilities. It is hypothesised that the more students are integrated with the HE context, the higher their chances of success are.

The fourth and final stage of this model is the ongoing integration stage. In this stage, if students are integrated successfully with the HE system, the expectation is that they will continue on their academic path. Bean and Metzner's (1985) concept of academic outcomes (as measured by intellectual and academic development) and psychological outcomes (as

measured by later educational goals and commitment to the institution) is highlighted in this stage. Academic outcomes (as the direct result of academic integration in the previous stage) include students' intellectual and academic development (Tinto, 1975). Academic development relates to students meeting certain standards of the academic system of the HE institution, while students' intellectual development pertains to students' identification with and evaluation of the norms of the academic system. Students who are academically successful and identify with the academic norms on campus will be more likely to continue their HE careers, while students who struggle academically might not be allowed to continue their education or might decide to drop out. Furthermore, students' integration (on academic and social levels) will affect their psychological outcomes, as measured by later educational goals and commitment to the institution. Students who feel satisfied with their HE experience and development will more likely be more committed to the HE institution and their own educational goals than students who feel less satisfied will be. Students' subsequent educational goals and institutional commitment will influence their decisions to persist or drop out directly. While several of the researchers discussed above indicate the importance of students' academic and psychological outcomes in their persistence (Astin, 1984; Bean & Metzner, 1985; Berger & Milem, 1999; Braxton et al., 2004; Cabrera et al., 1992; Kuh et al., 2006; Strydom & Mentz, 2010; Tinto, 1975), Bean and Metzner (1985) highlighted the importance of specifically non-traditional students' goals and commitments (psychological outcomes) in their academic success. Therefore, the hypothesis in the final stage of the model is that academic and social integration will influence students' subsequent academic and psychological outcomes. In turn, students' dropout decisions will be influenced directly by these academic and psychological outcomes.

Figure 17 summarises the integrated model of student academic success that is used in this study:

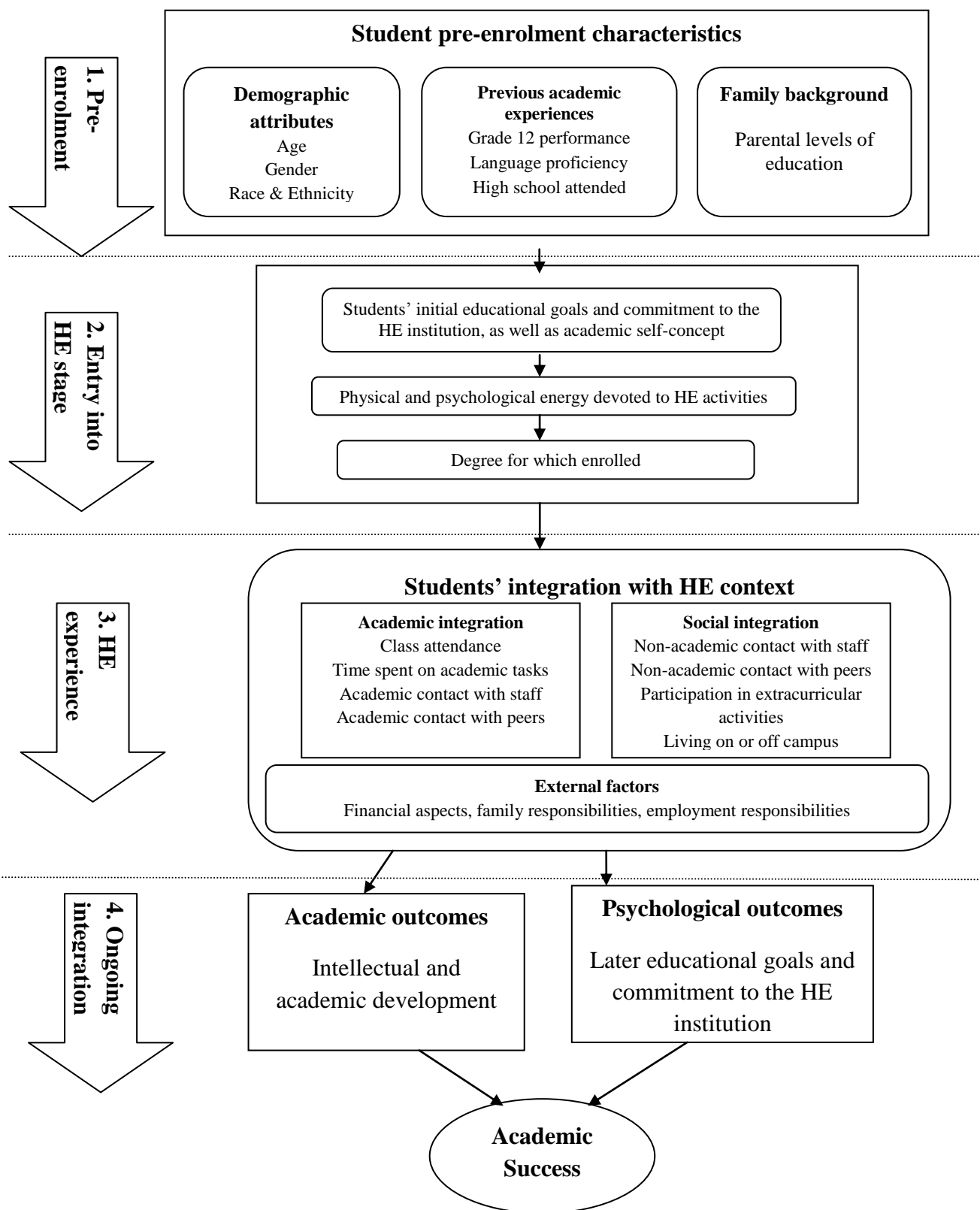


Figure 17. Integrated model of student success proposed for this study.

2.3 Chapter Summary

From the discussion in this chapter, the complexity and multidimensionality of academic success can be appreciated. The chapter presented the different perspectives and theories that exist regarding the definition and conceptualisation of academic success in HE. Furthermore, various theoretical models that attempt to explain and describe the concept of academic success were presented and compared. The chapter concluded with a proposed model that integrates the important aspects of the various theories, as relevant for this study. In the next chapter, the different predictors of academic success as set out in the proposed model are discussed.

Chapter 3: Factors that Play a Role in Students' Academic Success

In the previous chapter, several theories and models pertaining to student success were discussed before an integrated model of student success that will be utilised in this study was put forward.

In this chapter, each of the aspects related to academic success, as presented in the integrated model of academic success, is discussed. Firstly, the pre-enrolment stage is discussed by using the three categories set out in the model, namely demographic attributes, previous academic experiences, and family background information. Secondly, the entry into HE stage is considered with specific focus on students' initial academic goals and their initial commitment to the specific HE institution, academic self-concept, the physical and psychological energy students devote to their HE activities, and the degree for which students are enrolled. Thirdly, the HE experience stage is examined by discussing academic integration factors, social integration factors, and external factors. Lastly, the ongoing integration stage is considered. Students' academic outcomes, psychological outcomes, and ultimate academic success are of importance during this stage.

Limited research pertaining to factors that play a role in academic success exist in the SA context (Mentz, 2012). Therefore, the discussion below is complemented by research conducted on an international level.

3.1 Pre-enrolment Stage

As indicated in Chapter 2, the first stage of the integrated model of academic success is the pre-enrolment stage. Several researchers called attention to the importance of pre-enrolment factors in students' academic success (Bean & Metzner, 1985; Cabrera et al., 1992; Jama et al., 2008; Milem & Berger, 1997; Pascarella & Terenzini, 1980; Reason et al., 2005; Tinto, 1975). Kuh et al. (2006) were of the opinion that "who students are and what they do before starting their tertiary education make a difference in their chances for obtaining a baccalaureate degree or another postsecondary credential" (p. 17). Pre-enrolment attributes include students' demographic attributes, their previous academic experiences, and their family background.

3.1.1 Demographic attributes. Various researchers point out the importance of students' demographic attributes in predicting their academic success (Kuh et al., 2008;

Mentz, 2012). Students' demographic attributes affect the likelihood that students will do what is necessary to prepare for and achieve academic success (Kuh et al., 2006). The demographic attributes that are discussed in the following section include students' age, gender, race, and ethnicity.

3.1.1.1 Age. When considering students' age, a distinction is made in literature between traditional versus adult/non-traditional students. Traditional students enrol in HE directly after high school and are between the ages of 18 and 22 (Adams & Corbett, 2010; Rabourn, Shoup, & BrckaLorenz, 2015). Non-traditional students, on the other hand, are regarded as being older than 23/24 years of age (depending on the specific study) (Bean & Metzner, 1985; McCormick, 2011; Rabourn et al., 2015). Miller Brown (2002) and Ross-Gordon (2011) indicate that adult/non-traditional students are the fastest growing population in HE in the USA and that adult students constitute at least 50% of the entire student population.

In the previous chapter, Bean and Metzner's (1985) theory regarding the different attrition processes of traditional and non-traditional students is discussed. The most significant differences are that adult/non-traditional students are not as affected by social integration variables as by the external environment (the external environment comprises aspects such as families, neighbourhoods, peer groups, and work environments), whereas social integration variables are more significant than environmental factors are in the persistence of traditional students. McCormick (2011), Rabourn et al. (2015), Rautopuro and Vaisanen (2001), and Ross-Gordon (2011) agreed with Bean and Metzner (1985) that adult learners are more likely to drop out due to other responsibilities and multiple roles that they have to fulfil while studying.

Interesting evidence emerged in terms of the differences between the academic success of traditional and adult students on an international level (McKenzie & Schweitzer, 2001). Although non-traditional or mature students are admitted to their academic programmes with markedly lower educational attainment than their traditionally aged counterparts, Newman-Ford, Lloyd, and Thomas (2009) found that their academic performance is similar, if not better than that of traditional students. These results were confirmed by other researchers. Glass and Harrington (2002) wrote that older students generally achieve higher grade point averages upon graduating, but take longer to complete their degree programmes, while Graham and Gisi (2000) indicated that adult learners do as

well or somewhat better than traditional students do across measures of intellectual growth, scientific reasoning, problem solving, and career development. However, some similarities between adult and traditional learners also exist. For example, Graham and Gisi (2000) found that the more time mature students dedicate to academic activities, the greater their reported academic success; a pattern similar to that of traditional students. In addition, McCormick (2011) could not find a significant difference between the academic performance of traditional and adult students.

El-Khawas (2003) found that each group of students bring their own distinct perspective to HE, based on the different values and attitudes of each group, and that these differences will affect their academic success. Compton, Cox, and Lanaan (2006) agreed that adult students tend to be more diverse in their expectations of the HE institution, as well as in their motivation for attending the HE institution, than traditional students are. These views are echoed by Mlambo (2011), who stated that mature or non-traditional students are more likely to adopt a deep approach or meaning orientation towards their academic work, whereas traditional students are more likely to make use of a surface approach or reproducing orientation. He is of the opinion that the meaning orientation towards learning adult learners use could account for the fact that they achieve similar levels of academic success than traditional learners do, despite the challenges that non-traditional students have to overcome.

In SA, a traditional student is defined legislatively as being younger than 23 years of age, while an adult student is a student who is 23 years or older. The current educational policy in SA regulates that students under the age of 23 years can gain access to HE only with a matriculation endorsement. On the other hand, students of 23 years and older are able to obtain mature age exemption, which implies they can obtain access to HE without a matriculation endorsement. Furthermore, at 45 years of age and above, access to HE is possible without a school-leaving qualification. In SA, almost half of the total student population in HE are over the age of 23, and 80% of these students are at undergraduate level (Walters & Koetsier, 2006).

According to Buchler, Castle, Osman, and Walters (2006), limited research pertaining to differences between adult/non-traditional students and their traditional counterparts in terms of academic success has been conducted in SA. Walters and Koetsier (2006) wrote that adult students have several responsibilities to contend with while studying, including family, occupational, and financial responsibilities. As with their international counterparts,

responsibilities affect the time that SA adult students have available for their academic tasks. Despite their time constraints, Koen (2001) found no significant difference in the time it takes adult students to complete a degree and the time it takes traditional students to attain degree completion.

From the evidence discussed above, it is apparent that, although traditional and non-traditional students arrive at academic success through different pathways, few differences exist in terms of their success and persistence. Moreover, the need for more research specifically in the SA context is clear.

3.1.1.2 Gender. Gender is a pre-enrolment factor that has received considerable attention in local and international research that pertains to student success (Leppel, 2002; McKenzie & Schweitzer, 2001; Veas, Gilar, & Miñano, 2016). Dayioğlu and Türüt-Aşık (2004) indicated that various studies on gender differences and cognitive development can be found in literature. They postulate that the debate regarding gender and cognitive ability has developed from the debate on biological versus sociological determinism. Proponents of the biological arguments regarding gender differences view social factors as insignificant or secondary to biological factors such as brain structure. Colom and Lynn (2004) affirmed that males have larger brain sizes than females; therefore, they could be expected to have higher average IQs. On the other hand, Mackintosh (1998) could not find any difference between the average IQs of males and females.

In terms of the sociological perspective, Leonard and Jiang (1999) were of the opinion that females work harder and have better study skills than males, and that these aspects lead to better academic outcomes for females, if compared to their male counterparts. Similarly, Al-Dossary (2008) and Pascarella and Terenzini (1991) indicated that factors affecting student success vary significantly by gender and that females have goal commitments that are more pronounced than those of their male counterparts. Female goal commitment was also shown to be directly related to social integration, while this was not the case for males. Moreover, social integration was found to have a stronger effect than academic integration on female retention, while the opposite was true for males (Okorie & Ezeh, 2016).

Previous research conducted on an international level found that female students often perform better academically than their male counterparts do (Akgun & Ciarrochi, 2003; Al-Emadi, 2003; Baker, 2004; Chow, 2007; Linver, Davis-Kean, & Eccles, 2002). For example,

McKenzie and Schweitzer (2001) demonstrated that female students with similar high school performances than male students constantly outperform the male students in HE. In a study with undergraduate students in Turkey, Dayioğlu and Türüt-Aşık (2004) found that females outperform male students, even after controlling for the field of study and individual attributes. However, Brock (2010) stated that it is important to remember that more females than males enrol in HE; therefore, more females earn qualifications. Kuh et al. (2006) indicated that the number of women enrolling in HE in the USA increased proportionally from 1959 to 2002. Furthermore, more women than men graduate from HE institutions in the USA. Similar findings were found in Australia (McKenzie & Schweitzer, 2001).

In SA, the CHE (2010) pointed out that women enter HE in larger numbers than men do, which is consistent with the proportion of females in the South African population. In addition, females also perform better than males do in most qualifications. Conversely, Koen (2007) showed that, although the gap between male and female enrolment in postgraduate degrees is narrowing, SA males are still more likely to enrol in postgraduate degrees. However, in a South African study with 200 second-year students at the University of Venda, no significant differences between male and female students' performance could be established (Sikhwari, 2007). Mentz (2012) indicated that mixed results are reported with regard to gender and academic success. She pointed out that race, marital status, and living on or off campus could affect the success of men and women differently, and that further research on gender as predictor of academic success is necessary. Other SA researchers also indicated the role of gender in student success, but have views similar to those of Mentz (2012), in that the effect of gender on success should be considered together with other variables (Fraser & Killen, 2003; Keeve et al., 2012; Pitoniak & Yeld, 2013; Sikhwari, 2007; Strydom & Mentz, 2010).

3.1.1.3 Race and ethnicity. Early research by Ogbu (1986) examined the relationship between race (ethnicity) and students' academic success. He suggests that racial differences in academic performance could be the result of a lack of cultural and social identity. Owing to negative views regarding their culture, feelings of exclusion, and a lack of a personal identity, it was assumed that minority students would reject all aspects of the dominant culture, which could result in lower levels of academic success. Several other researchers built on the work of Ogbu (1986) and expanded on the idea of cultural identity and acculturation. While Castro-Salazar and Bagley (2010) pointed out the positive effect of

successful acculturation on student success, Eng et al. (2008) showed that acculturation could have a negative effect on student success.

Zirkel (2005) suggested that lecturer expectations may be a significant inhibitor of the academic success of minority students. He found a consistent mismatch between lecturers' and students' perceptions of minority students' future academic performance. Lastly, Fram, Miller-Cribbs, and Van Horn (2007) indicated that minority students are more likely to attend underresourced schools and are therefore at a disadvantage because of the negative effects of social segregation.

Brock (2010) postulated that, although success and persistence rates differ significantly by race and ethnicity, this is not a good predictor of academic success due to large variations in demographic groups. It would seem that race differences are more pronounced when they are considered in combination with socioeconomic status (King, 2000). In addition, Pascarella and Terenzini (2005) pointed out that access to financial aid may balance academic success among students of different races. Abbott and Joireman (2001) were of the opinion that the relationship between ethnicity and academic success is mostly an indirect relationship; ethnicity relates to low-income levels, and in turn, low income relates to academic success.

Differences in academic success for different races are pronounced in HE institutions in the USA. Underrepresented groups have been found to be more prone to drop out at secondary education level and not to enrol in HE (Social Science Research Council Project, *Transitions to College: From Theory to Practice*, 2005). Kuh et al. (2006) summarised statistics from several studies and stated that only 21 percent of African American students and 33 percent of Hispanic students have reading skills required for HE. Burley, Butner, and Cejda (2001), as well as McCabe (2003) indicated that race (lower SES) is associated with lower graduation rates. Lastly, Brock (2010) also found a relationship between race/ethnicity and academic success. He indicated that Asian students have the highest levels of persistence and degree completion, followed by white students, Hispanic students, and lastly, African American students.

Notwithstanding the immense changes in SA student bodies since the 1980s, segregation in South African HE institutions remains a salient factor that continues to require attention and intervention (Gbadamosi & De Jager, 2009; Dixon & Durrheim, 2003; Steyn et

al., 2014). Similar to international trends, white SA students perform better than students of colour do in terms of the average number of years required to graduate, as well as the percentage of students who actually graduate (CHE, 2010; Letseka & Breier, 2008). Furthermore, the CHE (2007) indicated that white students' graduation rates are consistently higher than those of their black and coloured peers are in all degree programmes at South African HE institutions. Van Zyl (2016) agreed with the above and states that the low success rates of especially black and coloured students are a matter of concern. While research showed that students from historically disadvantaged groups still do not achieve similar levels of academic success than students from higher socio-economic backgrounds do, Favish and Hendry (2010) showed that there has been steady improvement in the completion rates among previously disadvantaged students. This study pays particular attention to the effect of race on students' academic success.

3.1.2 Previous academic experiences. Hearn (2006) was of the opinion that researchers have shown on several occasions that the roots of academic success in HE are found in the past academic experiences of individuals. The influence of these experiences is not simply erased when students enrol and continue to influence the way in which individuals approach the HE context.

3.1.2.1 Grade 12 performance. In a study by Kersop (2008), the dual role that school performance plays in academic success was highlighted. She was of the opinion that scholastic performance indicates students' cognitive ability, which is a relatively stable characteristic and can therefore give an indication of the expected performance on an HE level. Secondly, school performance has a psychological effect on students' self-confidence and their attitude towards academic tasks and activities (Kersop, 2008). Researchers that advocate the use of school performance as a predictor for success in HE provide a further explanation for the predictive value of scholastic performance for academic success in HE. They point out that many of the factors that are important for academic success in HE have already been developed and used at school level. These include aspects such as motivation, intellectual abilities, study attitudes and methods, and reading abilities (Behr, 1985; McKenzie & Schweitzer, 2001; Ngidi, 2007).

Kuh et al. (2006), Martinez and Klopott (2003), and Thiele, Pope, Singleton, and Stanistreet (2016) were of the opinion that not only high school performance, but also the quality of schooling that students received is of importance. They postulated that students

who are prepared well during their high school education are the best positioned to achieve success in HE. Habley (2005) pointed out that well-prepared students possess a stronger academic grounding and are better able to implement effective study skills and strategies.

A number of research studies conducted in the USA and Australia supported the predictive value of previous academic performance in HE academic performance (Broder & Farley, 2007; Fraser & Killen, 2003; McKenzie & Schweitzer, 2001). However, evidence that indicated the limited predictive value of previous academic success has also been presented. Researchers pointed out that the use of previous academic performance proves to be inaccurate when used with students from a previously disadvantaged background (McKenzie & Schweitzer, 2001; Paras, 2001). Furthermore, McKenzie and Schweitzer (2001) showed that when making use of previous academic performance as a predictor of future success, the role of personality and motivational factors is not considered.

Similar to the international context, in SA, a large body of research exists in terms of the predictive value of Grade 12 performance (Eiselen & Geysler, 2003; Huysamen, 2003; Ngidi, 2007). Grade 12 marks are one of the most widely used factors in admission and selection processes at South African HE institutions (Van Rooy & Coetzee-Van Rooy, 2015; Van Rooyen, 2001). However, comparable to international evidence, research conducted in SA also pointed towards the inaccuracy of Grade 12 performance in the case of previously disadvantaged students (Tait, Van Eeden, & Tait, 2002; Van Rooy & Coetzee-Van Rooy, 2015). In addition to this, it should be acknowledged that the original Grade 12 Senior Certificate was replaced by the new National Senior Certificate (NSC) in 2008 (DOE, 2005; Van Rooy & Coetzee-Van Rooy, 2015). Changes in the calculation of admission scores (e.g., that the new outcome-based education curriculum does not distinguish between higher and standard grade subjects, as was the case with the previous dispensation) might have an effect on the prediction value of the NSC. Lemmens (2005) and Spaul (2013) pointed out that the new admission calculation may not be an accurate predictor of academic success and that more research is necessary to determine the predictive validity of the construct. Furthermore, the CHE (2010) and Spaul (2013) echoed the views of Habley (2005), Kuh et al. (2006), and Martinez and Klopott (2003) in reporting that the quality of students' high school education is of utmost importance in their performance in HE. This aspect is discussed in more detail in section 3.1.2.3 below.

3.1.2.2 Language proficiency. Researchers continue to be interested in the role that language proficiency plays in student success because higher numbers of diverse students with different home languages enrol in HE annually (Keeve et al., 2012). Van Zyl (2009) indicated that language proficiency consists of both organisational language skills and pragmatic language skills. Organisational skills can be categorised into grammatical skills and textual language skills. Grammatical skills include aspects that are involved in the effective use of language in a given context, like syntax, morphology, and vocabulary (Bachman, 1990). Textual skills are defined as an individual's ability to organise language in such a way that it is meaningful, and not just a sequence of grammatical expressions that has been put together in a meaningless fashion (Archibald, 1997). Pragmatic language skills refer to an individual's ability to use language successfully to reach a specific goal, and the ability to understand language in a specific context (Van Zyl, 2009). Yeld (2003) was of the opinion that students need to have grammatical, textual, and functional (pragmatic) language skills to be able to achieve success on an HE level. Moreover, Cummins' (1984) theory stated that cognitive academic language proficiency (CALP) cannot develop before basic interpersonal communication skills (BICS) have been developed.

Several studies pertaining to the effect of language proficiency on academic success of students have been conducted internationally. In a study conducted at the University of Adelaide in Australia, it was found that students that performed well in language proficiency tests were more likely to achieve academic success (Anderson, Reberger, & Doube, 2004). Moreover, Cronin (2003) and Feast (2002) also indicated the positive effect of language proficiency on academic success. Brooks and Adams (2002) pointed out that students' language proficiency has a greater effect on their success than culture or learning and teaching styles have. Korobova (2012) confirmed that students' language proficiency correlates with their academic success. Cook et al. (2004) and Kuh et al. (2006) reported similar findings from their research in Britain and the USA.

In SA, the matter of language proficiency is complicated by the fact that eleven official languages exist. English is used as a universal language, resulting in the majority of students in HE receiving tuition in a language other than their mother tongue. Many SA researchers argued that two factors need to be considered when the effect of language on student success is evaluated. Firstly, students' language of instruction is of importance, and secondly, students' levels of language proficiency should be considered (CHE, 2010; Van Rooy & Coetzee-Van Rooy, 2015). Several studies indicated the negative effect of tuition in a

second or third language. Students who receive tuition in their mother tongue perform on average 6% better academically, while students who do not receive education in their mother tongue show significant deficits (Gunning, 2002; Heugh, 2000). The CHE (2010) as well as Favish (2005) and Ncgobo (2009) found that the gap created by poor language proficiency is a key contributor to students' failure in HE. Cummins's (1984) theory could serve as an explanation for these findings. According to this theory, CALP cannot develop before BICS has developed. When students are educated in a language different from their first language, their CALP will be lacking. In terms of this study, it is important to note that in SA, mostly students from other race groups (not white) have home languages different from English. Therefore, these students would be more likely to receive tuition in a language different from their mother tongue (Van Zyl, 2016).

Moreover, Basson (2006) indicated that the language proficiency of students in SA is generally poor, especially among non-mother tongue speakers. Similarly, Ayliff (2010) noted that too little emphasis is placed on the development of cognitive language proficiency during language teaching in schools, resulting in students arriving in HE with poor academic literacy skills. Naudé et al. (2011) pointed out the direct relationship between students' language proficiency and their academic success. They are of the opinion that language proficiency is especially important to consider as a factor in the academic performance of non-mother tongue speakers. Several other researchers found a relationship between language proficiency and academic success in SA (Eiselen & Geysers, 2003; Koch, 2007; Louwrens, 2003; Makgalemele, 2005; Stephen, 2007; Yeld, 2003).

3.1.2.3 High school attended. Students' high school experiences and the intensity of the high school curriculum are important antecedents to their success in HE. Hence, students who are well prepared at HE entry are most likely to be successful in HE, despite their financial situation, who they are, or the HE institution in which they are enrolled (Kuh et al., 2006; Mentz, 2012; Pike & Saupe, 2002). Habley (2005) indicated that these students not only have a strong academic grounding, but also have the ability to implement efficient study skills and methods. Kuh et al. (2006) postulated that the quality of students' secondary school experiences affect most of the dimensions of success in HE. Jones, Coetzee, Bailey, and Wickham (2008) contended that the school system is the environment where students' foundational competencies in literacy and numeracy and higher-order cognitive skills, as well as time management, study methods, and independent learning skills, should be cultivated. If

these skills are not developed adequately during the high school years, the transition and adaptation to HE will be much more challenging.

Internationally, Herzog (2006) indicated that literature on the relationship between high school characteristics and students' academic success, as well as levels of readiness for HE, is extremely limited. However, despite the limited number of studies on this subject, Horowitz and Spector (2005), Mora and Escardibul (2008), and Smith and Naylor (2005) agreed about the relevance of the characteristics of the high school attended (such as type of school, peer effects, and resources) on the academic success of students in HE.

In terms of the effect of the type of high school attended on students' academic success in HE, research findings are contradictory. In the USA, Hoffman, Llagas, and Snyder (2003) found that African American students are more likely to attend public high schools in low socio-economic communities with inferior resources. This will eventually result in inferior levels of education and poor levels of readiness for HE. Considine and Zappala (2002), Kwesiga (2002) and Sentamu (2003) agreed that the high school environment and teachers' expectations have a strong influence on students' success. They pointed out that many teachers working in poorer communities with fewer resources have lower expectations of their learners, which could lead to poorer performances and lower levels of readiness for HE among learners. Moreover, McNabb, Sarmistha, and Sloane (2002) and Smith and Naylor (2001) reported that, in the UK, students who attended Government schools (dependent on the Government for its finances and governance) outperformed students who attended independent schools (independent in its finances and governance) once they entered HE. Similarly, students who attended Independent schools in Australia did not perform as well as their counterparts who attended Government schools prior to enrolling in HE. Some researchers (Smith & Naylor, 2005; Win & Miller, 2005) attribute this to the fact that in independent schools, students' academic performances are raised at school level (they have to achieve lower marks in order to get a distinction compared to Government school students).

In SA, the teaching and learning methodologies applied at high schools often do not provide the majority of students entering HE with the skills and knowledge they need to be successful (Fakude, 2012; Leibowitz et al., 2009; Mentz, 2012; Van Rooy & Coetzee-Van Rooy, 2015). Fisher and Scott (2011) referred to this occurrence as an articulation gap – a disparity or discontinuity between the learning requirements of HE programmes and the skills and competencies of students entering HE for the first time. They postulated that there is a

difference between the statutory minimum requirements for admission to HE and the level of academic preparedness that is required for academic success in HE. Jones et al. (2008), Mouton, Louw, and Strydom (2013), Stephen, Welman, and Jordaan (2004), and Van Zyl (2016) agreed that this articulation gap is especially problematic for students from disadvantaged backgrounds. In SA, all public schools are categorised into five groups or quintiles, based on the poverty of the community around the school and infrastructural factors. Quintile 1 is the “poorest”, while Quintile 5 is the “least poor”. Currently, schools in quintiles 1 to 3 are non-fee-paying schools, while quintiles 4 and 5 comprise fee-paying schools (Minister of Education, 2013). Only a small group of privileged students have the opportunity to attend schools of a high quality (mostly fee-paying schools) where they will receive good education, whereas the majority of students (almost 80%) are dependent on township and rural schools (mostly non-fee-paying schools). The majority of schools in rural and disadvantaged communities in SA are underresourced and employ underqualified teachers. These schools do not have the infrastructure, resources or adequately qualified staff to teach learners and develop in them the competencies needed for success in HE (Spaull, 2013; Steyn et al., 2014; Van der Berg, 2008). For these reasons, particularly students from disadvantaged backgrounds struggle to cope with the academic challenges of HE in SA. Stephen et al. (2004) and Steyn et al. (2014) found that white, wealthy, urbanised students tend to come from backgrounds that are more privileged and are more likely to obtain the best results in HE, while black, poor, rural students tend to have poorer socio-economic backgrounds and fare the worst in HE.

3.1.3 Family background. The effect of parents’ education levels on their children’s academic performance is an expanding field of research, as more first-generation students (students whose parents did not attend an HE institution) are entering HE institutions internationally and in SA (Carlton, 2015; Carnevale & Fry, 2000). However, Reason (2009) suggested that, despite its growing importance, the influence of the family on student success may be one of the most underresearched components. In this section, the aim is to shed some light on this topic by specifically examining the effect of parental levels of education on the academic success of their children.

In a study by Eccles (2005), the effect of parental education was demonstrated as being twofold. Firstly, parents with higher levels of education will have better academic skills, and will therefore also be able to create an academic home environment with sufficient stimulation and exposure to educational experiences. Secondly, these parents will most

probably have better occupational opportunities and will be able to ensure schooling of a good quality for their children. Kuh et al. (2007) and Jury, Smelding, and Darnon (2015) had a similar point of view and indicate that family background affects students' academic performance because it plays a role in whether or not a child will attend a high-quality school, have high educational aspirations, and whether a student will experience sufficient parental and familial support. These aspects have a positive effect on the academic performance of the children.

Internationally, Carlton (2015) and Pike and Kuh (2005) concurred that first-generation students typically are from lower socioeconomic status and are less involved in academic activities than their continuous-generation peers. Furthermore, these first-generation students often receive less family support, need to work full time and frequently feel isolated in the HE environment, which leads to lower levels of academic success. Asrat (2007) indicated that, owing to first-generation students' lack of comprehension of the requirements for success in HE, these students do not allocate adequate time for studying and other academic activities and therefore does not achieve success. Kuh et al. (2006) and Pascarella and Terenzini (2005) found that continuous-generation students, whose parents received tertiary education, were five times as likely to obtain a bachelors degree as first-generation students were.

In the SA context, Singh and Mbokodi (2004) agreed with Pike and Kuh (2005) that in many cases, first-generation students are from lower socioeconomic groups and may receive less support from family members. Cloete (2001) indicated the indirect effects of lower levels of parental education on their children's academic success in HE. She found that, in several cases, parents with low levels of education had poorer paying jobs and belonged to a lower socio-economic group, which in turn had a negative effect on their children's academic opportunities. Cloete (2001) proceeded to show that parents belonging to these lower socio-economic groups did not put high value on their children's education and did not motivate them to participate in academic activities. All of these aspects lead to lower educational aspirations in students, which could have a negative effect on their academic performance.

Particularly in SA, where unequal educational opportunities existed in the past, large numbers of students (especially black students) entering HE institutions come from lower socioeconomic backgrounds and receive less support from family (Mentz, 2012; Swaner & Brownell, 2008). Jacobs and Pretorius (2016) indicated that more than 70% of students

currently entering HE in SA have first-generation status. Mentz (2012) stated that, given the challenges that first-generation students have to cope with, it is not surprising to find differences in the academic success of first-generation students and continuous-generation students. The CHE (2010), Legotlo et al. (2002), and MacGregor (2007) indicated the positive effect of parental levels of education on their children's chances of obtaining an HE qualification. They indicated that first-generation students are more likely to drop out than their continuous-generation peers.

3.2 Entry into HE Stage

Students' entry into HE is a critical stage in which students have to begin to integrate socially and academically with the HE environment (Jama et al., 2008). When students arrive at the HE institution, they are confronted with a new environment, new people from different backgrounds and cultures, and the academic organisation and structures of the institution. They are expected to negotiate these challenges in order to be able to move to the next stage of integrating successfully with the HE environment (Clift, 2003; Swail et al., 2003). Several factors involved in academic success once students arrive at the HE institution are discussed in the sections below, namely students' initial educational goals and commitment to the HE institution, students' academic self-concept, the physical and psychological energy students devote to their academic careers and the degrees for which students enrol.

3.2.1 Students' initial educational goals and commitment to the HE institution.

In the previous chapter, it is clear that several researchers regard students' initial educational goals and commitment to the HE institution as a contributor to academic success. Students' initial commitment to the institution is the extent to which they are committed to the specific institution in which they are enrolled (Tinto, 1993). Commitment to the institution could be influenced by several factors. Firstly, it could be a result of family traditions (e.g., a parent having attended the same institution). Secondly, family and/or peer pressure could lead to a preference towards a certain institution and, lastly, the perception that graduation from a specific HE institution could lead to better career options could also influence students' commitment to the institution (Morris, 2002; Tinto, 1993). Along with commitment to the institution, students' initial commitment to their educational goals is a key element in their ultimate academic success (Tinto, 1993). When students have specific goals in terms of the degree and modules they will enrol for, the level of education (bachelors degree, honours

degree etc.) they want to obtain, as well as particular vocational goals, they are less likely to dropout from HE (Morris, 2002).

Tinto (1975) and Pascarella and Terenzini (1980) signified the importance of students' initial commitment to their goals of obtaining a degree and their commitment to the HE institution. They believed that these commitments would affect student success and persistence. Tinto (1975) explained that students' initial commitment to their goals and the institution will affect their academic and social integration positively. In turn, this will affect commitment and ultimately affect student success. Therefore, the higher students' initial commitments are, the better their integration with the HE system will be, and the better their levels of subsequent commitment and possible success will be. Bean and Metzner (1985) built on Tinto's (1975) suggestion and confirmed the effect of goal and institutional commitment on student success.

According to Schippers, Scheepers, and Peterson (2015), Locke's (1968) theory of goal setting could provide insight into the importance of students' initial educational goals. Locke (1968) postulated that goals are direct regulators of human behaviour. He assumes that human behaviour is focussed and that goals direct and sustain individuals' efforts towards performing and achieving certain actions. Chipunza and Masiza (2004) used Locke's (1968) theory to examine the effect of goal setting on student performance and were of the opinion that student goals can influence performance positively because goals direct students' attention, mobilise their efforts, and increase their persistence.

On an international level, several researchers agree that initial goal and institutional commitment are important factors in students' academic success (Graham, 2007; Hirsch, 2001; Lotkowski, Robbins, & Noeth, 2004; Lüftenegger et al., 2016). Graunke, Woosley, and Helms (2006), and Nora, Barlow, and Crisp (2005) found that first-year students with high levels of goal and institutional commitments were more likely to graduate within a smaller number of years than first year students with lower levels of commitment were. Schippers et al. (2015) postulated that high levels of goal commitment could aid culturally diverse students from lower socio-economic backgrounds in achieving academic success.

Although students' commitment to the institution provides information that can explain student retention, it has been very difficult to quantify (Morris, 2002). Furthermore, Bailey, Leinbach, and Jenkins (2006) and Lüftenegger et al. (2016) indicated that, although

students with higher initial goal and institutional commitments seem to be more likely to achieve success, in some cases, students with lower levels of commitment do achieve success and students with higher levels are less successful than expected. They proposed that other factors (race, socio-economic status, and HE experiences), in combination with levels of commitment, can give a better indication of expected success among students.

Similar to international findings, Mentz (2012) stated that students' initial commitments to their goals not only are a valid predictor of success, but also are significant in the prediction of persistence for students who are at risk in SA. Mentz (2012) added that, apart from academic performance at school, goal commitment is one of the best predictors of academic success among minority groups. Several other SA researchers also point out that students' commitment to their academic goals and the institution affect their academic success positively (Dass-Brailsford, 2005; Fakude, 2012; Fraser & Killen, 2003, 2005; Sadler & Erasmus, 2005).

3.2.2 Academic self-concept. Sanchez and Sanchez Roda (2003) and Sigelman and Rider (2006) described self-concept as an individual's perceptions, knowledge, and attitudes regarding their own unique characteristics. It is generally accepted that self-concept is ordered in a hierarchy with general self-concept at the top of the hierarchy and domain-specific self-concept views (e.g., academic, social, and physical) resorting under general self-concept (Bong & Skaalvik, 2003; Byrne, 2002). In this study, the focus is specifically on academic self-concept. Trautwein, Lüdtke, Marsh, Köller, and Baumert (2006) defined academic self-concept as individuals' evaluation of themselves regarding their academic abilities.

Various researchers agree that the relationship between academic self-concept and academic success is complex. Dambudzo (2009) supported the belief that consistent success or failure has an effect on academic self-concept and that the level of academic success is influenced by individuals' academic self-concept. Sanchez and Sanchez Roda (2003) agreed on the complexity of academic self-concept, and indicate three models that could offer explanations for this relationship. Firstly, academic success determines academic self-concept. According to this point of view, individuals' academic experiences of success or failure play an integral role in the development of academic self-concept. In this model, evaluations of others, as well as social comparisons, play an important role. Secondly, academic self-concept determines the level of academic success. In this model, it is proposed that individuals' academic self-concept determines how successful they are academically.

Lastly, academic success and academic self-concept influence each other equally. In this model, other variables that could possibly affect academic success and academic self-concept are also considered. Furthermore, Merritt and Buboltz (2015) explained that students from poorer socio-economic backgrounds with parents who have lower levels of education have a lower academic self-concept and lower levels of academic success. Similarly, DeFreitas and Rinn (2013) found ethnic differences in students' academic concept and academic success, with white students performing better than African American and Latino students in terms of academic self-concept scores and subsequent academic success. These notions are especially significant in the SA context where large numbers of ethnically diverse students from various socio-economic backgrounds enrol in HE.

Internationally, different opinions exist in terms of the predictive value of academic self-concept in academic success. In terms of evidence from an international perspective, Barker, Dowson, and McInery (2005) indicated that studies have continually shown a moderate to strong relationship between academic success and academic-self-concept. McCoach and Siegle (2003) and Kornilova, Kornilov, and Chumakova (2009) stated that as much as a third of the variance in academic success can be explained by academic self-concept. Cockley (2000) found a strong positive correlation between the academic self-concept and academic success of African American college students. Although several other researchers agree that academic self-concept positively correlates with students' academic success (Kobal & Musek, 2001; Lau & Chan, 2001; Michie, Glachan, & Bray, 2001; Trautwein et al., 2006; Yilmaz, 2014), other researchers reported that the correlation between academic success and academic self-concept is not significant (Awad, 2007; Freeman & Areepattamannil, 2008).

Although general self-concept has been researched extensively, less literature, especially in the SA context, exists in terms of academic self-concept (Basson, 2006). It would seem that, similar to international findings, opposing views exist regarding the role of academic self-concept in academic success in SA studies. According to Boakye (2015) and Pretorius (2007), students from lower socio-economic backgrounds are likely to attend poorer schools with fewer resources and receive education of a poorer quality than students from higher socio-economic backgrounds do. These students are more likely to have negative academic experiences and more negative academic self-concept views, which in turn affect their academic performance in HE negatively. Kessi and Cornell (2016) indicated that black students are more likely to view themselves as "second-class students", and that students who

viewed themselves in this way have significantly lower levels of academic success than their peers have. Thus, it would seem that students' socio-economic and ethnical backgrounds could affect levels of academic self-concept and therefore academic performance. Finally, Sommer (2013) argued that, although most of the research conducted on academic self-esteem and success point to a positive correlation between these constructs, there are different opinions regarding the directionality of this relationship.

Sikhwari (2014) found a significant positive correlation between success and academic self-concept among SA students. Moreover, McCoach and Siegle (2001) indicated academic self-concept combined with motivation are two of the best predictors of academic success. Basson (2006) and Lemmens (2005) agreed that a positive relationship exists between academic success and academic self-concept. Vogel and Human-Vogel (2016) found that students' academic self-concept had a positive effect on the amount of time and effort they devoted to their academic careers and that this, in turn, had a positive effect on their academic success. On the other hand, Van den Berg and Coetzee (2014) failed to confirm the strong relationship between success and academic self-concept among SA students. Furthermore, Keeve et al. (2012) found that academic self-concept viewed in isolation did not correlate with academic success, but that it could play a role when considered along with other possible predictors of academic success. More research, specifically in a SA context, is required on the subject of academic self-concept.

3.2.3 Physical and psychological energy devoted to HE activities. In the previous chapter, Astin's (1984) notion of students' levels of physical and psychological energy devoted to the academic experience was introduced. He views physical energy as students' behaviour and psychological energy as the level of motivation that students possess. Donahue (2015) and Korobova (2012) agreed that the physical and psychological energy that students spend on their HE careers resemble student motivation.

Several researchers indicate the reciprocal relationship between students' motivation and their behaviour. Coetzee (2011) was of the opinion that students who are motivated will be more enthusiastic to learn and more willing to become involved in academic activities, while unmotivated students will be less systematic in their learning efforts and less likely to ask for help when they do not understand what is being taught. Similarly, Afzal, Ali, Khan, and Hamid (2010), Awan, Noureen, and Naz (2011), Onete, Edet, Udey, and Ogbor (2012), and Sikhwari (2014) viewed motivation as an internal condition that directs and maintains

behaviour. They agreed that motivation has a positive effect on students' academic behaviour. Pintrich and Schunk (2002) indicated the positive influence of motivation on students' learning and performance, but add that students' behaviour in turn influences their motivation. Thus, it would seem that high levels of motivation (or psychological energy) will lead to positive academic behaviour (or physical energy) and that positive academic behaviour in turn influences students' levels of motivation (Ajiboye & Tella, 2006; Bailey & Phillips, 2015; Kusurkar, Ten Cate, Vos, Westers, & Croiset, 2012).

Several researchers indicate the positive effect of high levels of motivation on students' success. On an international level, Afzal et al. (2010), Ahmed and Bruinsma (2006), and Lau and Chan (2001) found motivation to be positively associated with academic success. Robbins et al. (2004) indicated that students with high levels of motivation are more likely to persist in their studies and succeed academically than their less motivated counterparts. Ajiboye and Tella (2006) stated that adequate learning and success is unlikely to take place in the absence of motivation. However, McCoach and Siegle (2001) viewed the relationship between motivation (psychological energy) and academic success as complex, while Areepattamannil and Freeman (2008) could find only a weak correlation between high levels of motivation and academic success.

In terms of the effect of physical energy (student behaviour) on academic success, it is indicated above that high levels of psychological energy (motivation) will most likely lead to positive student behaviours. Akey (2006) and Neto (2015) showed that literature largely supports the positive role that students' behaviour play in their academic success. According to Foreman and Retallick (2013) and Wagner and Ruch (2015), researchers support Astin's (1984, 1999) view that the psychical energy students dedicate to their HE experience affect their success positively. They showed that the frequency and quality of students' involvement in activities are associated with higher educational objectives, improved self-confidence, and better interpersonal and leadership skills, which in turn have a positive effect on success.

In the SA context, Bitzer (2009) found that high levels of motivation had a considerable effect on the academic performance of especially first-year students. Sikhwari (2014) postulated that a lack of motivation among students is one of the most significant factors affecting students' learning and academic success, in particular among historically disadvantaged students. Bailey and Phillips (2015) indicated that students who are motivated to study and put effort into their academic tasks are more satisfied with their HE experience

and also perform better academically. Lastly, Coetzee (2011) and Mentz (2012) also indicated the importance of motivation for students' success. In addition, Mentz (2012) indicated the importance of physical energy (student behaviours) for student success. Behaviours that have been shown to have a positive effect on student success include spending sufficient time on academic activities, attending class regularly, adequate contact with staff and peers, and participation in extracurricular activities (Mentz, 2012).

3.2.4 Degree for which enrolled. Leppel (2001) was of the opinion that student success and persistence may be related to the degree or programme for which a student is enrolled. She postulated that students whose degrees are oriented to a specific profession (e.g., engineering, health, or business) may have different success rates than students enrolled in other degrees or programmes because the choice of professional degrees may reflect higher commitment to educational goals. Students enrolled in these degrees and programmes may regard the job-related benefits of staying enrolled in HE as very important, and therefore they may have higher rates of persistence and success. On the other hand, Leppel (2001) stated that students who are enrolled in degrees and programmes that are not linked directly to particular career fields may have chosen their areas of study because of a high interest in studying the particular subjects. Consequently, these students may be more likely to think that their areas of study are interesting, which leads to higher levels of success and persistence. Leppel (2001) also mentioned that, if students in professional degrees and programmes find their coursework uninteresting, they may be more inclined to change degrees or even drop out from HE altogether. She concluded that two effects may be related to the degree for which students are enrolled and their academic success, namely students' commitment to their academic goals, and their interest in the subjects that form part of the degree or programme, and that these effects could be functioning in opposite directions.

Internationally, various researchers agreed that the degree for which students are enrolled could affect their success and persistence. Daempfle (2003) and Purdie (2007) were of the opinion that the degree for which students are enrolled could have both direct and indirect consequences on student success, and they state that students enrolled in science, mathematics and engineering courses encounter less welcoming and engaging classrooms in comparison to other students, which could have a negative effect on their success. Nora, Barlow, and Crisp (2005) found that the demanding course loads of certain degrees and programmes could lead to students dropping out from HE. Ryan and Glenn (2004) indicated that students who enrol for degrees that include academic skill development have higher rates

of success that their counterparts who enrol for degrees that are more focussed on integrating students into the academic community. On the other hand, Crissman Ishler and Upcraft (2005) showed that students who are enrolled in more complicated or technical degrees are less likely to drop out from HE, even though conventional knowledge would seem to indicate the opposite. This was confirmed by Pascarella and Terenzini (2005), who found that students enrolled in business, science, health-related, and engineering degrees are more likely to reach success than students in other degree programmes.

In SA, racial imbalances are still evident in enrolments in the different degree programmes. According to the CHE (2009), degrees in education continue to attract the highest proportion of black students, while all other fields of study continue to attract disproportionately more white students. Similarly, the DHET (2014a) stated that black and previously disadvantaged students are still underrepresented in the areas of engineering, science, human and animal health, and postgraduate qualifications. Furthermore, graduation rates also vary by field of study, with the highest success rates in the human and social sciences and the lowest success rates in business, commerce, and management (CHE, 2009). However, in a study by a CHE task team (CHE, 2013), it was found that students in more selective professional degrees achieved higher rates of success than did students enrolled in other degrees.

It is evident from the discussion above that the relationship between the degree for which students are enrolled and their academic success may be complex. When examining international as well as SA research, no clear answer emerges, and more research is required on the topic.

3.3 HE Experience Stage – Integration with the HE Context

Researchers pointed out the importance of students' integration with the HE context as a determinant of student success (Jensen, 2011). Students who are unable to integrate with the HE context successfully are at risk to perform poorly academically, feel maladjusted, or discontinue their studies (Hatakka, 2012). In the following section, factors that contribute to students' integration with HE are examined. Three main sections are examined, namely students' academic integration, social integration, and external factors that play a role in student success.

3.3.1 Academic integration. In the previous chapter, Tinto's (1975, 1987, 1993) concept of academic integration was introduced. Bahr, Toth, Thirolf, and Massé (2013) stated that the definition of academic integration has evolved over the years. Originally, Tinto (1975) characterised academic integration in terms of two aspects: firstly, meeting certain explicit academic standards of the HE institution (measured primarily through the use of marks achieved), and secondly, identifying with the norms of the academic system. In a later work, Tinto (1987) defined academic integration as a student becoming integrated or incorporated with the intellectual and academic systems of the HE institution and becoming skilled members in these systems. More recently, Tinto (1993) postulated that the idea of academic integration refers to students' perceptions of their "fit" with the academic environment of the HE institution. These perceptions are the result of interactions with peers and staff in formal and informal academic contexts (Wolf-Wendel, Ward, & Kinzie 2009).

Townsend and Wilson (2009) agreed with Tinto (1975, 1987) that academic integration refers to students' sense of belonging to an academic institution. Whannell, Alen, and Lynch (2010) viewed academic integration as students' feelings of connectedness to and interest in the academic sphere of the institution, students' motivation, attendance, and their participation in academic activities. Flowers (2006) was of the opinion that Tinto's (1975, 1993) notion of academic integration includes, but is not limited to, experiences that students have at an HE institution that support academic development, promote cognitive development, and improve students' academic motivation to pursue academic tasks.

Tinto (1993) posited that positive interactive experiences with the academic sphere of the HE institution will enhance the probability that students will persist in the HE institution until completing their degrees. Several researchers (Deil-Amen, 2011; Morris, 2002; Pascarella & Terenzini, 2005) have indicated the effect of academic integration on student retention and success.

Another important concept that was discussed in the previous chapter that links closely with student integration, is student engagement (Kuh et al., 2006). Student engagement has enjoyed significant attention since the mid-1990s, and the notion of student engagement evolved from the work of Astin (1984) regarding student involvement (Trowler, 2010). According to Mentz (2012), the study of student engagement regards students' involvement in their learning in terms of the effort and time that are put into academic tasks and activities as crucial in academic success. Furthermore, Pascarella and Terenzini (2005)

stated that the time and energy that students devote to their educational activities relate directly to student success. This is confirmed by the work of various other researchers in the field of student engagement that found robust correlations between student involvement in educational activities and positive outcomes in terms of student success (Berger & Milem, 1999; Kuh et al., 2005, 2006; Trowler, 2010).

In this study, the notions of Tinto (1993), Kuh et al. (2006), Whannel et al. (2010), and Wolf-Wendel et al. (2009), namely that academic integration and involvement refer to students' interaction with the academic environment of an institution and students' perceptions of their "fit" with the academic environment were used. Students' class attendance, the time they spend on academic tasks, and their academic contact with staff and peers are discussed below as variables of academic integration.

3.3.1.1 Class attendance. The class attendance of students has become a focus point in studies on student success (Kuh, 2003; Wilms, 2003). Romer (1993) and Stanca (2006) stated that one of the major problems in assessing the effects of students' class attendance on their academic performance is the fact that attendance levels are not intrinsic. This happens because in some cases, class attendance is optional and students can choose whether they want to attend classes and lectures or not. In turn, these choices are affected by individual characteristics like students' abilities, effort, and motivation, which are also very likely to affect academic performance. Students who are more interested in the study material, more skilled academically, or more motivated to achieve high marks are more likely to attend classes than less motivated or less interested students are. Thus, it may be that students' motivation and determination could be the driving factor behind class attendance. However, Romer (1993) was of the opinion that, although the relationship between class attendance and academic performance includes the effects of other student characteristics, a significant part of students' academic performance could still be explained by their class attendance.

Various international researchers suggest a correlation between class attendance and academic success. Ajiboye and Tella (2006) and Alexander and Hicks (2016) found that students who attended classes more regularly also performed better academically, while Jameel and Hamdan (2015) and Ledman and Kamuche (2002) found that students with better attendance rates not only achieved higher marks, but also had better knowledge regarding the course material. Moreover, although Salamonson, Andrew, and Everett (2009) and Singh, Granville, and Dika (2002) could find no link between time spent on other academic activities

and academic success, both of these studies signify the importance of class attendance on students' success. Credé Roch and Kieszczynka (2010), Landin and Perez (2015), and Moore et al. (2003) also confirmed these results. Chung (2004) viewed regular class attendance as an obvious condition for student success and explains that students who do not attend classes regularly do not achieve academic success and may withdraw from HE. He added that there will be students who do attend class regularly and still struggle, just as there will be students who do not attend class and achieve success. However, he contended that evidence strongly suggests that class attendance is of importance in academic success.

In SA, limited literature exists regarding class attendance and academic success (Thatcher, Fridjhon, & Cockcroft, 2007). However, some findings indicate a positive correlation. Nyamapfene (2010) found that class attendance is an important determinant for academic success. Furthermore, he indicates that students who attend classes more regularly also have more contact with lecturers outside classes, which could further enhance their academic performance. Kersop (2008), Pickworth, Snyman, White, and Beukes (2005), as well as Thatcher et al. (2007) agreed that class attendance is an important indicator in student success. However, Van Walbeek (2004) found no significant correlation between class attendance and academic performance among first-year students. Wadesango and Machingambi (2011) showed that students from lower socio-economic backgrounds students who work part-time while studying have lower levels of class attendance and, consequently, lower levels of academic success.

3.3.1.2 Time spent on academic tasks. Several researchers have examined the importance of time that students devote to their academic tasks in their ultimate academic success (Carini, Kuh, & Klein, 2006). According to Jez and Wassmer (2011) and You (2015), it is logical to assume that the more time students spend on academic activities, the better their academic performance should be. However, the relationship between academic success and time spent on academic tasks yields positive results only when the time students spend on academic activities is engaged time. Carini et al. (2006) agreed that the more students study or practise a certain subject, get feedback on their assignments, and spend time on solving problems, the more proficient they should become in these academic activities, provided that the time spent on these tasks was engaged time. Furthermore, students who are involved in academic activities in HE develop habits and skills that broaden their capacity for continuous learning and personal development (Shulman, 2002).

Internationally, opposing views exist in terms of the value of time spent on academic tasks as a predictor of students' academic success. Kaminski, Laster, Rosen, and Turnock (2006) found that academically unsuccessful students spent less time on their academic tasks than their more successful peers did. George, Dixon, Stansal, Gelb, and Pheri (2008), Nasrullah and Khan (2015), and Nonis and Hudson (2006) also found that students who spent more time on academic tasks were generally more successful academically. However, some researchers failed to find a relationship between the time spent on academic tasks and academic success. Zulauf (2001) found that, although a correlation between time spent on academic tasks and academic success existed, this correlation was so insignificant that there would only be an increase of 0,025% in students' average marks for each hour of additional studying. Students would thus have to increase their study time with up to 40 hours per week to achieve a noticeable improvement in their academic success. Additionally, Salamonson et al. (2009) could not find a significant link between the time spent on academic tasks and academic success. Equally, Singh et al. (2002) found the time spent on academic tasks a poor predictor of academic success.

Limited research regarding the relationship between time spent on academic tasks and academic success exists in the SA context. However, the available results are similar to what was established internationally. In a study at the University of Cape Town, it was found that students who are at risk could be assisted to achieve academic success when these students were taught effective time management skills coupled with attending classes regularly. These students were encouraged to spend more time on academic tasks, and tutor groups were established to this extent (Davidowitz & Schreiber, 2008). Mentz (2012) and Theron (2015) also indicated that the time students spend on academic tasks has an effect on their learning, development and, ultimately, academic success. Conversely, Keeve et al. (2012) did not find a significant relationship between time spent on academic tasks and students' academic success. However, they did find that time spent on academic tasks, combined with other predictors of academic success would contribute positively to academic success.

3.3.1.3 Academic contact with staff. Several researchers documented the effect of formal (academic) and informal (non-academic) interaction between students and staff on student persistence and success. According to Umbach and Wawrzynski (2005), researchers investigating the academic interactions between students and staff in the HE context relied greatly on models of Astin (1993) and Tinto (1993). In these models, researchers proposed that the more involved students are in HE experiences, the more likely it is that student

learning, retention, and satisfaction will occur. One of the important aspects of successful academic integration in these models is positive interactions between students and staff in the classroom. Furthermore, Endo and Harpel (1982) were of the opinion that academic interaction between students and staff has several advantages. It provides an opportunity for students to obtain academic information, leads to better problem solving, improves critical thinking, and heightens the motivation to achieve academic goals.

Although most researchers focussed their attention on the informal or non-academic contact between students and staff as predictor of academic success (Alderman, 2008; Deil-Amen, 2011; Komarraju, Musulkin, & Bhattacharya, 2010), some international evidence regarding formal or academic student-staff contact has been recorded. Cole (2007), Cole and Jackson (2005), and Reed (2015) posited that academic student-staff contact is the major vehicle through which learning is facilitated and that, for this reason, it is not unexpected that these interactions have been linked significantly to students' intellectual development, learning, educational satisfaction, persistence, and academic success. Kuh and Hu (2001) found that the frequency of student-staff interaction has a significantly positive effect on the time that students spend on educational activities. They also showed that the more the student-staff interaction is related to academic aspects, the more positive the effect thereof is on student satisfaction and other academic outcomes. Kim and Lundberg (2015) found that academic interactions between students and staff are related to higher levels of engagement in class and higher levels of cognitive development among students, which consequently has a positive effect on academic success. Murray and Malmgren (2005) stated that academic interactions between students and staff are especially beneficial for students who are at risk from poor socio-economic backgrounds. Stage and Hossler (2000), and Tinto (2000) were of the opinion that students' interaction with staff members is the best predictor of student persistence. Several other researchers confirmed the positive effect of academic student-staff interaction on student success (DeFreitas & Bravo, 2012; Graunke & Woosley, 2005; Kim, 2010; Thompson, 2001). On the other hand, Cole and Griffin (2013) were unable to find a significant correlation between academic success and either formal or informal academic interaction between students and staff.

In terms of South African research, Strydom, Basson, and Mentz (2012) stated that, by interacting with staff members, students learn how experts think and are exposed to problem-solving strategies. They found that students are more likely to have academic than non-academic interactions with staff members. Fakude (2012) and Louw (2005) indicated that

student-staff contact has been linked with better academic performance among students in HE, while Coetzee (2011) pointed out that academic contact between lecturers and students has a positive effect on students' academic self-concept and motivation, which in turn affect their academic success. Moja, Schreiber, and Luescher-Mamashela (2014) also signified the importance of academic interactions between students and staff in students' overall integration with the HE culture and for their ultimate success in HE.

3.3.1.4 Academic contact with peers. Piaget (1971) highlighted the value of academic contact with peers and believes that interaction between peers is likely to encourage the exchange of thought and discussion. He valued the cognitive conflict that multiple perspectives can bring and considers co-operation and interaction as essential for the development of critical thought and objectivity. Likewise, Vygotsky (1962) also called attention to the value of peer learning. He considered peer collaboration and interaction as an integral part of the development of a range of cognitive skills.

Internationally, Astin (1993) argued that peer interactions are the most important source of influence in students' success in HE. Falchikov (2001) and Tran (2014) posited that interaction with peers in the academic setting can result in the development of cognitive and intellectual skills and enhance students' understanding of academic information, which indirectly leads to higher levels of success. Similarly, Altun (2015) and Latino and Unite (2012) indicated that peer influences in academic settings have significant positive effects on students. They found robust positive effects on students' educational outcomes, such as academic achievement, student retention, enjoyment of subject matter, and cognitive development in students' with regular positive academic peer interactions. Several other researchers also drew attention to the powerful influence of peer contact and interaction in academic contexts (Colvin, 2007). Dutch, Gron, and Allen (2001), Ender and Newton (2000), and Fortney, Johnson, and Long (2001) viewed academic peer interactions as more valuable than interactions with academic advisors and instructors, while Falchikov (2001) indicated that peer interactions in academic contexts positively affect levels of motivation and the amount of learning that takes place. Lastly, Winston and Zimmerman (2004) indicated a positive relationship between academic peer interaction and improved academic performance.

Although limited, it would seem that SA results echo international findings. Mentz (2012) indicated the importance of peer interactions in student engagement and, ultimately, student retention. Strydom, Basson, and Mentz (2012), Strydom and Mentz (2010), and

Strydom, Kuh, and Mentz (2010) indicated that students learn more and are involved more intensely in their education when they collaborate with others in terms of academic work. They found that although students in SA do take part in collaborative learning, these interactions are affected by race and ethnicity. In academic contexts, white and coloured students more frequently interact with peers than their black counterparts do. Moreover, Pillay, and Maharaj (2014) pointed out the importance of academic interaction among peers, specifically for previously disadvantaged students who are at risk. More research is required in the South African context regarding the effect of academic contact with peers, ethnicity, and race and the effect thereof on academic success.

3.3.2 Social integration. As with Tinto's (1975, 1993) notion of academic integration, his concept of social integration has been prominent in discussions regarding student persistence and success (Duggan & Pickering, 2008; Flaga, 2006; Townsend & Wilson, 2009). Similar to academic integration, Tinto (1975, 1993) posited that social integration plays an integral part in students' decisions to persist or depart from the HE institution. Demetriou and Schmitz-Sciborsky (2011) posit that researchers have been emphasising the significance of students' social integration in their academic success for the past 30 years.

In his initial description of the concept, Tinto (1975) depicted social integration as students' perceptions of "fit" or sense of belonging to the specific HE institution. This was the result of informal peer group associations, extracurricular activities, and interaction with lecturers and staff, all of which facilitate varying degrees of friendship support, faculty support, social communication, and collective affiliation to the HE institution. In turn, this connectedness will affect students' developing evaluation of the costs and benefits of remaining enrolled in HE. According to Tinto (1993), the extent of students' social integration does not rely on a broad or complete compatibility with the dominant culture of the institution, but rather on students' ability to create connections and develop relationships within at least one institutional subculture. Moreover, social integration does not solely influence students' persistence by improving their sense of emotional well-being, but also through assisting their academic integration with the HE institution (Bahr et al., 2013).

Roberts and McNeese (2010) and Trowler (2010) posited that students must become engaged in activities that encourage both academic and social reinforcement. Moreover, Roberts and McNeese (2010) were of the opinion that the first step for students in overall

student engagement is to engage socially with peers, since these interactions support academic learning and also filter through into other areas of the HE experience. Furthermore, Thomas (2012) stated that engagement in the social sphere of the HE institution can offer informal support to students. Lastly, Osterman (2000) indicated that social engagement fosters a sense of belonging, which is associated significantly with students' academic success.

As indicated above, social integration and engagement involves the experiences that enable students to connect to the HE institution environment, which would aid in their psychological and social development and contribute to their overall satisfaction and success in HE (Flowers, 2006; Tinto, 1975, 1993). Positive experiences in the social systems of the institution will reinforce students' educational goals and commitment to the HE institution and strengthen the decision to persist (Morris, 2002; Tinto, 1993). Swail et al. (2003) and Osterman (2000) indicated that the establishment of friendships with peers and connections with staff members are important factors in student integration and success.

In this study, variables that are discussed next as part of students' social integration and engagement include students' non-academic contact with staff and peers, students' participation in extracurricular activities, and students' living arrangements (living on or off campus).

3.3.2.1 Non-academic contact with staff. The importance of non-academic or informal contact between students and staff members has been documented for decades (Alderman, 2008; Halawa 2006; Kuh, 2001; Thompson, 2001). Coates and Radloff (2014) were of the opinion that non-academic contact between students and staff is just as important as academic student-staff interaction. They postulated that informal interactions open up potential for conversations across a wide range of issues, introduce students to previously unfamiliar ways of engaging with their modules and disciplines, and place the learning experience in an associated context that supports student engagement. Lastly, improved informal student-staff interactions will create a sense of belonging in students and will reinforce a shared responsibility for student success. Glass, Kociolek, Wongtrirat, Lynch, and Cong (2015) agreed with the previous statement but emphasise the positive effect that non-academic contact with staff members has on the academic success of racially diverse students and students who are at risk.

On an international level, Pascarella and Terenzini (1980) drew attention to the importance of informal or non-academic student-staff interaction. They indicated that this informal contact is of great importance, specifically for students with lower levels of initial commitment to their educational goals and the HE institution. Reason et al. (2005) reported that contact between students and staff could predict the development of academic competence among first year students. Other researchers link non-academic contact between students and staff members to several other positive student outcomes, including higher levels of academic achievement, student satisfaction, and retention (Alderman, 2008; Anaya & Cole, 2001; Pascarella & Terenzini, 1991). Amelink (2005) focussed particularly on first-generation students and found that the students that reported positive non-academic interactions with staff were more satisfied with their academic experience and more likely to achieve academic success than did students with fewer interactions with staff.

Although Kuh and Hu (2001) and Kuh et al. (2006) agreed that a relationship between informal student-staff contact and positive outcomes for students exists, they pointed out that it is difficult to determine if students that are more satisfied and more confident seek out relationships with staff or if students that seek out relationships with staff become more confident and satisfied because of the interaction. However, Kuh et al. (2006) posited that for most students, most of the time, interaction with staff members will be advantageous. On the other hand, Cole and Griffin (2013) found that no significant relationship exists between students' academic achievement and either academic or non-academic contact with staff.

In SA, Jones et al. (2008) also highlighted the importance of informal contact between students and staff members, especially in the case of students who are at risk. Similarly, Strydom, Basson and Mentz (2010), and Strydom and Mentz (2010) indicated the importance of academic and non-academic contact between student and staff members as contributors to student engagement and student success. Furthermore, they found that extremely low levels of interaction between students and staff exist in informal contexts in South African HE institutions. Siyengo (2015) and Thomas (2012) found that especially first-generation students find it very difficult to engage in informal contact with staff, which contributes to their sense of isolation and could lead to these students dropping out prematurely. However, more research in SA is necessary to confirm the importance of non-academic contact between students and staff and students' academic success.

3.3.2.2 Non-academic contact with peers. Various researchers explored the effect of non-academic contact with peers on academic success. Korir and Kipkemboi (2014), Stanton-Salazar (2004), and Stanton-Salazar and Spina (2005) indicated that non-academic contact with peers can affect student success in two ways. Firstly, peer contact can provide students with access to academic resources, and secondly, non-academic contact with peers can promote an ideology of academic achievement among students, which in turn will affect students' academic efforts positively.

Internationally, Astin (1993) indicated that peers are the single most important factor in students' lives and that it can affect every aspect of students' development. Bean and Metzner (1985) found that peer interactions are more significant than informal contact with staff in predicting student persistence. Swail et al. (2003), Thomas (2002), and Wilcox, Winn and Fyvie-Gauld (2005) showed that peer support is related directly to persistence in HE and that students who have dropped out perceive themselves as having less social interaction than their peers who have remained in HE. Moreover, Kuh et al. (2006) indicated that social interactions with peers play an important role in what students do and how they will think about their experiences in HE. In turn, this will affect their overall development and persistence. Karp (2011) also pointed out the importance of non-academic contact with peers. She postulated that social relationships affect persistence positively because it helps students to feel connected and comfortable in the HE context. Nicpon et al. (2006) indicated that, although they found that higher levels of peer support were related to higher levels of persistence and lower levels of loneliness, they could not find a link with academic achievement. Several other international researchers indicated that students who socialise with their peers regularly are more fulfilled in their HE experience, have higher levels of academic success, are more committed to persist in their HE career, and report higher levels of learning (Antonio, 2004; Byl et al., 2016; Krause, 2005; Leka, 2015; Lundberg, 2003; Milem, Umbach, & Liang, 2004; Pascarella & Terenzini, 2005; Rhodes & Nevill, 2004).

Non-academic interactions with peers seem to be even more important to students who are at risk. As stated above, Korir and Kipkemboi (2014), Stanton-Salazar (2004), and Stanton-Salazar and Spina (2005) postulated that peer interactions can provide students with access to academic resources, which is especially important in the case of students who are at risk or first-generation students who have limited access to academic resources and social networks. For these students, social relationships with students from more advantaged backgrounds can assist them in entering beneficial social networks and provide them with

access to academic resources. Moreover, Swail et al. (2003) and Wu, Garza, and Guzman (2015) showed that students who are at risk but engage in social activities become part of the social environment of HE and are more likely to persist, while Jensen (2011), and Larimore and McClellan (2005) also found that social support matters greatly with regard to retention and success of students who are at risk in the HE experience. Finally, Karp (2011) indicated that social relationships are very important for students who are at risk, because these students particularly find it difficult to remain enrolled in HE without being connected socially with their peers.

In contrast to the arguments above, in his early research, Tinto (1975) warned that excessive social interaction could lead to lower levels of academic performance, but that this depends on the types of individuals with whom the social interaction occurs. He agreed with Stanton-Salazar (2004) and Stanton-Salazar and Spina (2005) that social interaction with peers could promote an ideology of academic achievement among students, which in turn would affect students' academic efforts positively. Conversely, Tinto (1975) stated that the opposite could also be true and that social interactions with peer groups that are less interested in performing well academically could lead to lower levels of academic motivation among students. Moreover, Gibson (2005), Leka (2015), and Saunders (2008) showed that students who fail to balance their academic and social responsibilities (and consequently spend more time on social activities than on academic tasks) have lower levels of academic performance.

Similarly, several South African researchers have indicated the importance of non-academic contact with peers. Fraser and Killen (2003, 2005), Hobden and Hobden (2015), Moos (2009), Ngidi (2007), Strydom et al. (2010), Strydom and Mentz (2010), and Zulu (2008) suggested that students' social interactions are an important predictor of their success in HE. Resembling international findings, in the case of students who are at risk, Malefo (2000) showed that social support is a very important predictor of these students' academic success and persistence. Siyengo (2015) also highlighted the importance of social peer interactions for students who are at risk and first-generation students, but states that these students typically have less social peer interactions, especially during their first academic year. On the other hand, Fakude (2012) stated that social interactions with peers could promote or obstruct academic success, depending on the type of peer groups with which a student associates.

3.3.2.3 Participation in extracurricular activities. Student participation in extracurricular activities and the effects thereof on their academic success have been examined in various studies (Inkelas, Daver, Vogt, & Brown Leonard, 2007). Broadly defined, extracurricular activities include activities such as campus organisations, student government, community engagement, internships, studying abroad, clinical assignments, and leadership training (Braskamp, Trautvetter, & Ward, 2006).

According to Braskamp et al. (2006) and Lumley, Ward, Roberts, and Mann (2015), participation in extracurricular activities contributes to student success when it meaningfully involves students in activities outside the classroom in a style that complements learning that is taking place inside the classroom. Correa, Dumas, Jones, Mbarika, and Ong'oa (2015), Kuh et al. (2006), and Pascarella and Terenzini (2005) hypothesised that participation in extracurricular activities may affect student persistence and success in different ways. Firstly, students are connected psychologically and socially to a similar group that is achievement driven and that reinforces the aspiration to graduate. Secondly, students are able to engage in activities that develop skills and competencies that allow them to succeed in HE.

On an international level, several researchers (Correa et al., 2015; Inkelas et al., 2007; Lehr et al., 2004; Pike & Kuh, 2005) related students' participation in extracurricular activities positively to persistence and success. It creates an environment in which to encourage student-staff interactions and integrates academic affairs and student affairs meaningfully (Braskamp et al., 2006; Danganan & Nuqui, 2015; Kuh et al., 2006). Astin (1999) postulated that uninvolved students tend to neglect their studies and typically abstain from participating in extracurricular activities. He added that students who participate in almost any type of extracurricular activities are the least likely of all students to drop out of HE.

As in the case of non-academic contact with peers, it seems that participation in extracurricular activities is of particular importance to first-generation students and students who are at risk. Pascarella, Pierson, Wolniak, and Terenzini (2004) found that first-generation students benefit more than other students from extracurricular activities with peers, but that these students are less likely to participate in these activities than students are who are not first-generation. Furthermore, Pascarella and Terenzini (2005) found that students with low levels of commitment to their educational goals and to the HE institution gain most from extracurricular activities because these activities are likely to increase their commitment to the

HE and to their educational goals, two conditions that are widely linked to success. Conversely, Shamsudin, Ismail, Al Mamun, and Nordin (2014) could find no significant link between students' participation in extracurricular activities and their levels of academic success.

In SA, the importance of extracurricular activities in student success was indicated by Moos (2009) and Strydom et al. (2010), who positively associated participation in these activities with higher levels of engagement among students. However, two national South African studies found overall low rates of participation in extracurricular activities among students (Strydom & Basson, 2010; Strydom & Mentz, 2010). In Strydom and Mentz's (2010) study, it was reported that students from different types of HE institutions spent on average only two hours per week on extracurricular activities, while 70% of students in Strydom and Basson's (2010) national study reported that they spent no time on extracurricular activities at all. Lourens, Fourie, and Mdutshekela (2014) highlighted the importance of involvement in extracurricular activities for students who are at risk, but state that precisely these students exhibit very low levels of participation in extracurricular activities. Pather and Chetty (2015) agreed that participation in extracurricular activities is important, especially for diverse students who are at risk; however, they indicate that it should be balanced with time spent on academic tasks in order to achieve academic success. This study examined the effect of participation in extracurricular activities on student success and aimed to contribute to the limited amount of research conducted on the subject in SA.

3.3.2.4 *Living on or off campus.* In Astin's (1984) student involvement theory, he posits that living on campus provides several opportunities to become involved in HE, which in turn leads to persistence in HE. In addition to Astin's view, many other researchers remark on the benefits of living on campus. Firstly, Donahue (2015), Kuh et al. (2006), Pascarella and Terenzini (2005), and Pike and Kuh (2005) postulated that students who live on campus normally have more interactions with staff members and peers and are more likely to be fulfilled in their HE experience. They indicated that living on campus has a direct and positive effect on students' academic outcome and educational goals.

Secondly, according to Pascarella and Terenzini (2005) and Pike and Kuh (2005), living on campus has an indirect effect on students' persistence and completion of degrees because they are more positive about the campus climate and report greater personal development and growth, which in turn affects persistence.

Lastly, Donahue (2015) and Kuh et al. (2006) proposed that living in a residence on campus assists students to develop social relationships with peers who are coping with similar difficulties and challenges. The development of social interactions is in line with Astin's (1993) finding that relationships with peers have the most powerful influence on students' social and cognitive development. Thus, it would seem that living on campus itself does not necessarily lead to persistence, but that it is important because it creates opportunities for other experiences that contribute directly to student persistence (Pike & Kuh, 2005).

Several international research studies confirmed the value of living on campus, showing higher levels of involvement and engagement in students who live on campus than their peers who reside off campus (Bowen et al., 2009; Inkelas et al., 2007; McInnis, James, & Hartley, 2000; Stassen, 2003; Thomas, 2002; Wilcox et al., 2005). Astin (1999) stated that living in a campus residence has a positive effect on retention among all types of students, regardless of race, gender, ability or family background, while López, Ruth, and Wodtke (2010) stated that living on campus has a significant benefit for African American students.

Findings of studies in SA echo results from the international context. Nel, Troskie-De Bruin, and Bitzer (2009) indicated that commuter students are at a disadvantage from both social and academic points of view, especially during their first academic year at an HE institution. They showed that many of these students live off campus due to financial reasons. Mbarara and Celliers (2013) stated that in SA, more students live off campus than on campus and that these students are at a disadvantage due to the amount of time spent on travelling to and from campus, which could be spent better on academic and social activities. Several other SA researchers (Botha, Snowball, De Klerk, & Radloff, 2013; DHET, 2011; Hlalele, 2015; Jones et al., 2008) confirmed the value of living on campus. Mentz (2012) was of the opinion that, because student enrolments in SA are expected to continue to grow in the future, it is doubtful that HE institutions will be able to accommodate the majority of students in campus residences; therefore, it is very important to gain insight into the contributors to success, specifically for students who reside off campus. The DHET (2011) confirmed that HE institutions in SA currently can accommodate only about 20% of students enrolled in HE in campus accommodation. This poses a challenge for especially disadvantaged students from lower socio-economic circumstances who do not have the financial resources to afford accommodation off campus, adding to their financial burden and affecting their chances of success negatively. Moreover, students who live on campus have access to resources that could aid in their academic success (DHET, 2011).

3.3.3 External factors. In addition to the academic and social factors discussed above, several external factors also pertain to students' integration and ultimate success. In the previous chapter, the importance of external factors was demonstrated by highlighting research done by Al-Dossary (2008), Demetriou and Schmitz-Sciborski (2011), Bean and Metzner (1985), and Tinto (1993). They showed that, particularly in the case of non-traditional students, external factors have the greatest effect on success. External factors that were included in this study are financial aspects, family responsibilities, and employment responsibilities.

3.3.3.1 Financial aspects. Several researchers have examined the effect of financial aspects on student success (Bennett, McCarty, & Carter, 2015; Bojuwoye, 2002; Nel et al., 2009; Swaner & Brownell, 2008). If students feel that they are under financial pressure, they might decide to enrol for fewer modules or find work off campus. These behaviours could limit students' opportunities for social and academic integration. Therefore, financial aspects could be regarded as a psychological stressor that forces students to redirect their attention from academic endeavours to financial concerns. If students' financial situations remain stressful, students are drawn away from the academic and social spheres of the HE institution in order to focus on other activities (e.g., working or being consumed by their financial difficulties) (Bennett et al, 2015; Cabrera et al., 1992; St John, Cabrera, Nora, & Asker, 2000).

Internationally, large-scale research conducted in the USA provided evidence of the role financial aspects play in student retention and graduation. These studies illustrate lower success rates for low-income students after other factors such as race, ethnicity and gender have been considered (Adelman, 2006; Bowen et al., 2009; Pascarella & Terenzini, 2005). According to O'Brien (2004), students from low-income families are less likely to enrol in HE. Once these students enter the HE institution, they are more likely to manage the demands of HE with work, children, and other family responsibilities, and are less aware of the support resources available to them on campus. Bowen et al. (2009) specify that, although finances are not the only factor influencing academic success, financial aid makes a significant difference to students' enrolment and success rates. Other researchers confirmed the importance of financial aid in students' success (Bonney, Sam & Laryea, 2016; Britt, Canale, Fernatt, Stutz & Tibbetts, 2015; Choy, 2004; Stratton et al., 2005; Tinto, 2000).

SA is still recovering from the economic disintegration associated with the country's history of racial segregation (Breier, 2010; Van Zyl, 2016). The severe levels of poverty that still remain in the SA society are illustrated by Statistics South Africa (2014), which reports that 45% of the SA population are classified as "poor", with 20.2% of the population living in "extreme poverty". Manik (2014) stated that there is not only an extremely wide divide between the rich and poor, but that this division is also still strongly demarcated according to race. This is demonstrated by the fact that 54% of black South Africans are classified as "poor", with only 0.8% of white South Africans falling in the same bracket (Statistics South Africa, 2014). According to Letseka, Breier, and Visser (2009) and Van Zyl (2016), when students from extremely poor socio-economic backgrounds enter HE, they often find it challenging to meet the basic financial requirements of their studies, and any unforeseen expenses aggravate the problems they face. The result of these financial challenges is that many talented students in the South African HE system find themselves restricted by finances; consequently, they are, unable to translate their potential into actual performance. Jones et al. (2008) and Van Zyl (2016) concluded that financial aspects are one of the most tangible and critical factors affecting especially disadvantaged low-income students' access to HE and academic success. The levels of stress that these students experience regarding their financial concerns may affect their academic performance and social integration with the HE context negatively. They were of the opinion that students' financial circumstances interlink with other aspects of success in complex ways. According to Jones et al. (2008) and Van Zyl (2016), sufficient financial resources can enable students to engage fully both academically and socially and thus lead to student success. Similarly, other researchers pointed out that students from low-income families experience above-average levels of stress due to financial difficulties and that these levels of stress contribute to poor academic performance and high dropout rates (Bojuwoye, 2002; Botha et al., 2005; Dass-Brailsford, 2005; Hobden & Hobden, 2015; Letseka & Maile, 2008; Nel et al., 2009; Pillay & Ngcobo, 2010; Van Rooy & Coetzee-Van Rooy, 2015).

3.3.3.2 Family responsibilities. In the previous chapter, the effect of family responsibilities is highlighted. Al-Dossary (2008), Bean and Metzner (1985), Braxton et al. (2004), Demetriou and Schmitz-Sciborski (2011), and Tinto (1993) indicated that family commitments and responsibilities can affect students' educational goals and commitment to the institution directly, which in turn will affect retention and dropout. These researchers regard family responsibilities as an important contributor to withdrawal from HE.

Thomas (2002) affirmed the importance of family responsibilities for student success in much of the research done on retention in the USA and the UK. Several international researchers point to the negative effect of family responsibilities on academic success. Sy and Brittan (2008) showed that, since family responsibilities make it difficult for students to engage socially and academically, too many family responsibilities can lead to dropout. Alami (2016) and Jeffreys (2012) were of the opinion that family responsibilities are not compatible with students' academic responsibilities, resulting in higher levels of stress among students. They caution that having more family responsibilities could hinder study skills, class attendance, staff and peer interaction, satisfaction, academic performance, and finally, retention. Several other researchers (Horton, 2015; Kuh, 2008; Perger & Takács, 2016; Rhodes, 2008; Stebleton & Soria, 2012; Strayhorn, 2012; Wood & Turner, 2011) confirmed the negative effect of family responsibilities on student success.

Grabowski, Rush, Ragen, Fayard, and Watkins-Lewis (2016) and Jenkins (2007) investigated the effect of family responsibilities on first-generation students and students who are at risk and found that these responsibilities limit students' abilities to participate in extracurricular activities, which in turn limits their HE experiences and overall academic development. These limitations may result in students taking longer to graduate or to drop out from HE completely. Furthermore, Jeffreys (2012) and Thomas (2002) also indicated that the negative effect of family responsibilities, as discussed above, is more pronounced for non-traditional students who are at risk.

As in the case with international evidence, South African researchers also confirmed the negative effects of students' family responsibilities on academic success (Fraser & Killen, 2003; Jama et al., 2008; Mdyogolo, 2012; Mooloo, 2014; Mudhovozi, 2014; Sadler & Erasmus, 2005). Pillay and Ngcobo (2010) echoed Jeffreys' (2012) view that family responsibilities are a source of stress for students. They indicate that particularly first-year students with family responsibilities find it difficult to make a successful transition from high school to HE. Students themselves reported that they are affected acutely by responsibilities at home and that these responsibilities make it difficult for them to concentrate on their academic activities.

Jones et al. (2008) indicated that, similar to international results, it seems that especially students from disadvantaged, racially diverse backgrounds find it difficult to cope with language barriers, social divisions, poverty, and academic challenges, while still

fulfilling their responsibilities to their families. Moreover, McGhie (2012) and Sadler and Erasmus (2005) stated that in SA, black students from lower socio-economic backgrounds have more family responsibilities than their white counterparts have, which amplifies the aspects with which these students have to contend to achieve success in HE.

In opposition to the information above, Malefo (2000) pointed out that family responsibilities and obligations may serve as driving forces behind older students' determination to succeed academically and therefore can have a positive influence on these students' performance.

3.3.3.3 *Employment responsibilities.* Employment among students is a rapidly emerging trend (Andemariam, Tsegai, Andre, Dhumal, & Tessema, 2015; Nonis & Hudson, 2006; Watanabe, 2005). Although multiple researchers have debated the effect of full-time and part-time employment on student success, consensus on how employment affects performance has not yet been reached, and different findings have been recorded (DeSimone, 2008).

García-Vargas, Rizo-Baeza and Cortés-Castell (2016) and Tinto (1993) hypothesised that limited time spent on employment on campus can assist students in integrating with the HE environment and thereby increase retention. However, long working hours, especially in the case of employment off campus, can lead to limited time available for academic work and study, and limited opportunities to interact with peers and staff. In turn, this could affect students' performance negatively.

Scott-Clayton (2012) suggested that work experience can enable students to develop soft skills, build career networks, secure references, and obtain career information. Being employed also allows students to pay their tuition costs, which could lower their levels of financial stress. Dadgar (2012) added to the benefits of employment during students' HE career by saying that employment can lead to higher levels of motivation, discipline, and structure, and enable students to study more effectively. Moreover, certain jobs can provide students with opportunities to engage with educated adults who can serve as mentors. She agreed with Tinto (1993) that the intensity and type of employment will establish whether student employment has positive or negative effects on academic performance.

On an international level, several researchers pointed to the negative effect employment has on students' success due to less time that is available for academic activities

and attending academic support programmes, and difficulty integrating with the HE context (Andemariam et al., 2015; Grabowski et al., 2016; Jenkins, 2007; Nonis & Hudson, 2006; Settles, 2011). Many of the researchers who indicated the negative effect employment has on success show that the number of hours a student has to work is the most influential factor, and not whether a student is employed or not (Furr & Elling, 2000; Jeffreys, 2012; Toutkoushian & Smart, 2001). Limited hours of employment (fewer than 15 hours per week on campus or fewer than 20 hours per week off campus) does not seem to have a significant effect on student success, and may even have a positive effect on student success (Andemariam et al., 2015; Kuh, 2009; Pinto, Parente, & Palmer, 2001; Watts, 2002). However, working more than 20 hours per week is correlated negatively with performance and persistence (García-Vargas et al., 2016; Pascarella, 2001; Pike, Kuh, & Massa-McKinley, 2008; Thomas, 2002).

Lastly, researchers indicated that the type of employment in which students are involved has an effect on student success. Jobs that are not related to students' academic fields of study (e.g., cashier or waiter) tend to have a negative effect on academic outcomes, whereas high-quality jobs that develop career-related skills may increase levels of maturity and experience and enhance the chances of success (García-Vargas et al., 2016; O'Brien & Shedd, 2001; Watanabe, 2005).

SA researchers proposed that especially students from disadvantaged race groups and backgrounds have to work fulltime or part-time to supplement their limited financial resources. Frequently, up to 80% of students' time is allocated to meeting their financial obligations by working. The pressure of coping with challenges of HE and fulfilling employment responsibilities places these students at risk for dropping out and have adverse effects on their academic success (Fakude, 2012; Govender, 2013; Mentz, 2012).

In the sections above, aspects that contribute to students' integration with the HE context have been discussed. The first important aspect that has been highlighted is academic integration and engagement of students. Students' class attendance, the time spent on academic tasks and their academic contact with staff and peers have been pointed out as important contributors to academic integration. Next, the social integration of students is discussed. Aspects that are discussed as important contributors in this section include non-academic interaction with staff and peers, participation in extracurricular activities, and the living arrangements of students. Lastly, external factors that could play a role in students'

integration are discussed. Financial aspects, family responsibilities and employment responsibilities are underlined as the most important contributors in this section.

3.4 Ongoing Integration Stage

Jama et al. (2008) and Tinto (1993) mention an ongoing integration stage that is important in students' ultimate success. Jama et al. (2008) stated that during the last stage of student integration, students will have a better grasp of the academic and social spheres, as well as the requirements of the HE institution. Similarly, Tinto (1993) indicated that during this stage, students will be involved in the academic and social communities of the institution and will have developed a sense of belonging to the HE institution.

In this stage, students will begin to specialise in their academic programmes and will be prepared for their roles as professionals. Similar to previous stages, students will continue to be introduced to the academic language and academic environment of the HE institution, and it is expected of them to be able to apply higher-order critical thinking skills (Jama et al., 2008; Lau, 2003).

Martinez (2003) was of the opinion that academic integration is more important than social integration during this stage, but that both forms of integration will continue to play a part in student success. As mentioned in the previous chapter, Bean and Metzner (1985) investigated the academic and psychological outcomes of the ongoing integration stage because of successful integration in the social and academic areas of the institution. Parikh (2008) agreed with this view and highlights the academic (intellectual) and psychological (non-intellectual) outcomes that result from successful integration in the academic and social spheres of the HE institution. These outcomes are discussed next.

3.4.1 Academic outcomes: Intellectual and academic development. Bean and Metzner's (1985) notion of academic outcomes because of integration is discussed in this section. Academic outcomes (as the direct result of academic integration) consist of students' intellectual and academic development (Tinto, 1975).

Students' intellectual and academic development pertains to their identification with and evaluation of the norms of the academic system. It also includes reasoning skills and knowledge of the subject matter. Students who are academically successful and who identify with the academic norms on campus, will be more likely to continue their HE careers, while

students who struggle academically might not be allowed to continue their education or might decide to drop out (Bean & Metzner, 1985; Parikh, 2008; Tinto, 1975).

Tinto (1975) indicated that intellectual and academic development represents a form of reward that is more intrinsic among students. It can be viewed as an integral part of students' personal development. Tinto (1975) suggested that not only the absence or presence of intellectual and academic development is important in student success, but also the fit between the intellectual and academic development of students and the current intellectual climate of the HE institution.

A variety of theoretical approaches to intellectual and academic development exists in the literature, including critical thinking, post-formal reasoning, and dispositional critical thinking (Evans, Forney, Guido, Patton, & Renn, 2010; Pascarella & Terenzini, 2005; Reason, 2009). Shavelson and Huang (2003) proposed a framework for examining intellectual development outcomes in HE and state that these outcomes range from acquisition of domain-specific knowledge and skills to very general reasoning and problem-solving abilities. General abilities and skills include aspects such as verbal and quantitative reasoning and are usually developed over many years in formal and informal education. Therefore, general intellectual and academic abilities are related to prior learning and exposure to educational experiences. Similarly, domain-specific knowledge and skills are developed through engagement and practice in a specific domain. What is learnt and the level to which intellectual development takes place depend on the abilities of each individual student and the level of interaction with his or her academic environment (Klein, Kuh, Chun, Hamilton, & Shavelson, 2005; Shavelson & Huang, 2003). Nusche (2008) proposed similar notions of intellectual and academic development outcomes. Her view of intellectual and academic development was based on Bloom, Englehart, Furst, Hill, and Krathwohl's (1956) taxonomy of educational objectives, and she suggested that students' intellectual and academic development goes beyond factual knowledge and comprehension and also includes academic skills such as synthesis, analysis, application, and evaluation. Nusche (2008) distinguished between knowledge outcomes and skill outcomes. Her definition of intellectual knowledge outcomes was similar to that of Shavelson and Huang (2003) and included general content knowledge and skills, as well as domain-specific knowledge and skills. On the other hand, Nusche (2008) defined skill outcomes as intellectual and academic skills that are based on complex processes of thinking, information processing, analytic operational thinking, problem solving, comprehension, and the evaluation of new ideas. These skills are not directly related

to specific fields of study and relate to all disciplines. According to Pascarella and Terenzini (2005), these skills allow students to be successful in a number of different contextual situations.

Kuh et al. (2006) pointed out that the development of intellectual and academic skills is possibly one of the most important and sought-after outcomes of attending HE. According to Kuh et al. (2006), it has never been more important for students to develop intellectual and academic skills in order to achieve academic success. Tinto (1975) agreed that intellectual and academic development, as an essential component of the development students' personalities and an indication of their integration with the academic sphere of the HE institution, has been found to play an important part in student success and persistence.

In the international context, Brown et al. (2008), and Comeaux and Harrison (2011) showed that students' intellectual and cognitive development plays an important role in academic success. Reason et al. (2005) posited that the intellectual and academic development of students leads to a variety of positive outcomes, including subject mastery, increased knowledge attainment, the development of a more positive self-concept, and improved interpersonal and leadership skills. Similarly, Parikh (2008) and Steur, Jansen, and Hofman (2016) indicated that students who show the highest levels of involvement in the pursuit of intellectual and academic development report the most progress in comprehending new ideas, applying principles, and understanding learning abstractions and subsequently perform better academically than less involved students do. Several other studies confirmed the role of intellectual and academic development in student success (American Federation of Teachers, Higher Education, 2011; Chi, Liu, & Bai, 2016; Kuh et al., 2008; Pike & Kuh, 2005; Reason et al., 2005; Spady, 1970). However, Furnham, Chamorro-Premuzic, and McDougall (2002) found that intellectual and academic development is not a significant contributor in students' success.

Strydom and Mentz (2010) and Strydom et al. (2010) indicated the value of intellectual and academic development in students' success in the SA context. Their point of view is confirmed by Louwrens (2003), who found a significant relationship between intellectual and academic development and academic success among students. Moreover, Fakude (2012) also indicated that students' levels of intellectual and academic development will affect the type of learning they use, which will subsequently affect their success. Conversely, while Robertson (2012) pointed out a positive relationship between intellectual

and academic abilities and academic success, she states that intellectual and academic development alone cannot account for all of the variation in students' success and that other factors also play an important role.

3.4.2 Psychological outcomes: Students' subsequent educational goals and commitment to the HE institution. As indicated in the previous chapter, psychological outcomes are the result of successful integration with both the academic and social spheres of the HE institution (Bean & Metzner, 1985). Students who feel satisfied with their HE experience and development are likely to be more committed to the HE institution and their own educational goals than students who feel less satisfied will be (Astin, 1984, Bean & Metzner, 1985; Tinto, 1975).

Kara and DeShields (2004) referred to Ajzen and Fishbein's (1980) model, in which it is stated that students' attitudes predict their behaviour intentions, which in turn predict students' actual behaviour. Kara and DeShields (2004) postulated that student satisfaction will lead to the intention to remain enrolled in HE, which in turn will lead to student retention and success. Astin (1993), Demaris and Kritsonis (2008) and Korobova (2012) agreed that higher levels of student satisfaction will lead to higher levels of retention and success among students.

Students' psychological outcomes can be seen in their subsequent educational goals and commitment to the institution. This is in line with the views of Astin (1984), Bean and Metzner (1985) and Tinto (1975), who postulated that higher levels of satisfaction among students will lead to higher levels of subsequent commitment to the HE institution and to educational goals.

Several researchers (Berger & Milem, 1999; Braxton et al., 2004; Tinto, 1975) highlighted the importance of students' subsequent educational goals and commitment to the institution in persistence and success. These researchers pointed out that students' initial educational goals and commitment to the institution when they arrive at the HE institution will be altered by experiences in the HE context (academic and social integration) and that the resulting levels of commitment to educational goals and the HE institution will affect dropout decisions directly. Subsequent levels of commitment to educational goals and the institution could be very different from students' initial educational goals and commitment to the institution, depending on the type of experiences students have upon entering HE. Students

who feel that their expectations of HE have been met will feel more satisfied with their HE experience and, consequently, will be more committed to their educational goals and the HE institution (Milem & Berger, 1997; Braxton et al., 2004; Cabrera et al., 1992; Davis McGraw, 2015; Strom & Savage, 2014; Tinto, 1975).

Reason (2009) stated that students with clearly articulated educational goals, effective academic skills, strong social connections, and high levels of commitment to the HE institution are less likely to drop out. Similarly, Braxton and Lee (2005) found a consistent connection between commitment to the institution, strong educational goals, and subsequent persistence in HE. Furthermore, they found a direct relationship between subsequent institutional commitment and success.

Bean (1983) and Spady (1970) found that, in most cases, higher levels of commitment to educational goals would have a positive effect on commitment to the institution, while commitment to the institution has a direct effect on dropout decisions. However, either high levels of commitment to educational goals or high levels of commitment to the HE institution could serve as a protective factor against dropout. If students are committed to the goal of completing their HE qualification, they may decide to remain in HE, even with little or no commitment to the specific institution, while students with high levels of commitment to the specific HE institution may have enough reason to continue until they complete their degrees, even if obtaining a degree is not an important goal (Cabrera et al., 1992; DeRemer, 2002; Spady, 1970; Tinto, 1975).

Internationally, various other researchers confirm the fact that initial educational goals and commitment to the institution will be influenced by experiences in the HE context and that these experiences will determine subsequent educational goals and commitment to the institution. These subsequent educational goals and commitment to the HE institution will have a direct effect on student success and persistence (Barbatis, 2010; Braxton et al., 2004; Comeaux & Harrison, 2011; Demetriou & Schmitz-Sciborski, 2011; Kuh et al., 2006; McKenzie & Schweitzer, 2001; Stratton et al., 2005; Tinto & Pusser, 2006).

Bitzer and Troskie-De Bruin (2004), Botha and Du Plessis (2007), and Fraser and Killen (2003) referred to the value of subsequent educational goals and commitment to the institution as important contributors in student success in the South African context. In addition, Chipunza and Masiza (2004) and Lubben, Davidowitz, Buffler, Allie, and Scott

(2010) specifically indicated the importance of students' subsequent educational goals in their persistence. They showed that students with clearly defined educational goals are significantly less at risk to drop out than students without clearly defined academic goals are.

3.5 The role of pre-and post-enrolment factors during the four stages of HE

In the preceding sections of this chapter, the important aspects of academic success during each stage of the HE experience (pre-enrolment, entry into HE, the HE experience, and ongoing integration) have been discussed. While all the factors in interaction with one another affect students' ultimate academic success, it is clear that certain factors are highlighted at certain stages of the academic journey. The role of pre- and post-enrolment factors needs mention here.

Students enter the HE context with a complex variety of characteristics, backgrounds, and experiences (Engstrom, 2008). The pre-enrolment factors that are regarded as relevant in this study include age, gender, race and ethnicity, Grade 12 performance, language proficiency, type of high school attended, and parental levels of education. Tinto (1993) proposed that each of the pre-enrolment factors affects the commitments and academic goals that students have when entering the HE system. Furthermore, pre-enrolment factors are important in establishing the conditions for students' interactions with the academic and social spheres of the HE institution, and depending on the pre-enrolment characteristics that students possess when entering HE, these interactions can be either positive or negative. Therefore, it would seem as if pre-enrolment factors play a crucial role at the beginning of students' academic career and are important during the stage of entering HE (e.g., specifically for first-year students). However, although pre-enrolment factors are important and affect student behaviour in the HE context, Engstrom (2008), Mapuranga, Musingafi, and Zebron (2015), Pascarella and Terenzini (2005), and Tinto (1993) proposed that student success cannot be viewed from a pre-enrolment perspective only and that post-enrolment factors should also be considered.

Post-enrolment factors can be described as factors that affect academic success after students have enrolled for and entered the HE context (Fraser & Killen, 2003, 2005). In this study, relevant post-enrolment factors are students' academic goals and commitment to the HE institution (initial and subsequent), academic self-concept, the physical and psychological energy that students devote to their academic careers, the degree enrolled for, academic and

social integration variables, external factors, and academic and intellectual development. These factors will determine whether students remain enrolled in HE and the degree of success that they achieve after enrolment. It is argued that these post-enrolment factors become more important later in the educational process (Engstrom, 2008; Mapuranga et al., 2015; Tinto, 1993) and during the HE experience and ongoing integration stages of HE (e.g., second- and third-year students).

3.6 Chapter Summary

In this chapter, the various predictors of academic success in the integrated model of student success have been explored. Similar to the previous chapter, the complexity of the prediction of academic success and the different predictors in interaction with one another have been highlighted. This has been achieved by discussing the various pre- and post-enrolment factors (factors related to students' entry into the HE context, integration with the HE context, and the ongoing stage of integration). Furthermore, it would seem as if pre-enrolment factors are more important at the beginning of students' academic careers, while post-enrolment factors become more important as students' academic careers progress. In the next chapter, the research questions and methodology of the study are discussed.

Chapter 4: Methodology

This chapter consists of a discussion of the methodology employed in the current research study. First, the research aim that is presented sets the stage for further discussion. Next, the research design employed is examined, followed by an explanation of the population group and sampling methods for the quantitative and qualitative sections of the study. Next, the chapter focuses on the different methods of data collection, which include the use of questionnaires and focus group discussions. An examination of the data analysis, including quantitative and qualitative methods is provided, followed by a discussion regarding issues of trustworthiness. Lastly, ethical considerations relevant to the current study are discussed.

4.1 Research Rationale, Aim and Questions

In the previous two chapters, the dynamic and complex nature of students' academic success became clear. Although various theories, models, and research studies have explained and explored student success from multiple points of view (Astin, 1984; Bean & Metzner, 1985; Bourdieu, 1977; Braxton et al., 2004; Cabrera et al., 1992; Jama et al., 2008; Kuh et al., 2006; Reason et al., 2005; Spady, 1970; Strydom & Mentz, 2010; Tinto, 1975; Wilson-Strydom, 2010), no definite answer has been reached regarding the prediction of student success. This is especially true for the SA situation, where the rapidly changing HE milieu and a shortage of clear research studies call for further research in this field. Therefore, the aim of the present study was to explore the factors and experiences related to the academic success of students in the Faculty of the Humanities at the UFS and to expand on the existing model of academic success within the South African context.

Acknowledging the intricate nature of academic success, a mixed-methods design was utilised, and multiple variables were scrutinised to enable the researcher to examine academic success from different perspectives. Although several of the models and theories in the previous chapters highlight the roles of the individual and the institution in academic success (Astin, 1984; Bean & Metzner, 1985; Berger & Milem, 1999; Cabrera et al., 1992; Kuh et al., 2006; Ogude et al., 2012; Pascarella & Terenzini, 1980, Strydom & Mentz, 2010; Tinto 1975), this study considered academic success from an individual point of view and focussed on the biographic, motivational, academic, social and external factors that relate to individuals' academic success.

Furthermore, the previous chapters highlight the importance of pre- and post-enrolment factors and their roles during different stages of students' academic careers. Pre-enrolment factors are seen as important at the beginning of students' academic career and especially during the first year of study, whereas post-enrolment factors become more important as students progress through their studies (second academic year and onwards) (Engstrom, 2008; Mapuranga et al., 2015; Pascarella & Terenzini, 2005; Tinto, 1993). For this reason, the roles of various factors at different stages of students' academic careers (students in their first, second, third, fourth, and fifth years of study) were examined.

Lastly, several researchers highlight the fact that the academic success of students who are at risk and/or previously disadvantaged students may be affected differently by certain factors than their more privileged counterparts may (Kuh et al., 2007; Strydom & Mentz, 2010; Theron, 2015). Considering the SA situation and the recent history of transformation from a segregated society, white students, in most cases, come from more privileged backgrounds than students from designated groups do (Boughey, 2002; Hornberger & Chick, 2001; Leibowitz, 2005). This important aspect was also acknowledged and investigated in this research study.

Thus, to reach the aim of this study, the following research questions were investigated:

Research question 1: Are there significant differences in students' academic success and post-enrolment factors with regard to various pre-enrolment factors?

Research question 2: Can a significant amount of the variance in academic success of students from designated and white groups be explained by various pre-enrolment and post-enrolment factors?

Research question 3: Can a significant amount of the variance in academic success of first-, second-, third-, fourth- and fifth-year students be explained by various pre-enrolment and post-enrolment factors?

Research question 4: What do students think affects their academic success?

The pre-enrolment factors that were considered included age, gender, race, language proficiency, Grade 12 performance, high school attended, and parental levels of education. The post-enrolment factors that were considered included initial educational goals, initial commitment to the HE institution, physical energy devoted to HE activities, psychological

energy devoted to HE activities, academic self-concept, participation in academic activities, academic contact with staff, academic contact with peers, non-academic contact with staff, participation in extracurricular activities, non-academic contact with peers, living arrangements, financial responsibilities, family responsibilities, and employment responsibilities.

With regard to Research Question 1, it was hypothesised that various significant differences in academic success and post-enrolment factors would exist between the various groupings, as discussed in the literature chapters.

With regard to research questions 2 and 3, it was hypothesised that the various variables would explain a significant amount of variance in academic success. Furthermore, it was hypothesised that the various variables (and the sets of pre- and post-enrolment factors) would explain a significant amount of variance in academic success of both race groups (designated and white groups), but that the predictive value of the various variables would be different for the two groups. In addition to this, it was hypothesised that the predictive value of pre-enrolment factors would decrease, while the predictive value of post-enrolment factors would increase as students mature in their academic career.

4.2 Research Design and Approach

Babbie and Mouton (2006) defined *research design* as the blueprint according to which the research will be carried out. Punch (2005) viewed it as the process through which the research questions are linked to the information that has been gathered through the research study. Thus, the research design is the manner through which the researcher plans and conducts the research study. A mixed-methods approach (Brannen, 2005) was employed in this exploratory and descriptive study. Each of these approaches is discussed in more detail in the sections below.

4.2.1 Exploratory research. Babbie and Mouton (2006) proposed that exploratory research is conducted in settings where limited knowledge pertaining to a specific focus area exists. When utilising this type of research, the aim is to gain greater insight into the construct. Maxwell (2013) and Stebbins (2001) pointed out that the goals of exploratory research are first to gain new knowledge regarding a specific construct and then to serve as a preliminary examination that will inform a more structured study of a certain phenomenon. It aims to explain central concepts and constructs while highlighting priorities for further

research. Lastly, exploratory research aims to develop new hypotheses regarding an existing phenomenon.

Although student success and the predictors thereof have been the focus of several research studies, this study focussed on a specific population group on which limited research exist. The exploratory research approach was adopted to gain better understanding regarding the academic success of students in the Faculty of the Humanities at the UFS. The focus of the quantitative section was on exploring the differences between various race groups, as well as the relationships between several constructs and academic success. The qualitative section focussed on exploring students' experiences of academic success and the factors associated with it.

4.2.2 Descriptive research. The major aim of descriptive research is to gain new knowledge, to give a description of a phenomenon that already exists, to describe the frequency of how often an event takes place and, lastly, to categorise information (Walker, 2005). The description of events can vary from a narrative description of events to a highly structured statistical summary of systematically classified variables. Furthermore, according to Babbie and Mouton (2006), the objective of descriptive research is not merely to describe the event or construct, but also to explain the possible origins and implications thereof. The most important consideration in descriptive studies is to collect accurate data pertaining to the constructs that are being studied (Maxwell, 2013).

Berg (2009) stated that a descriptive research design allows for great amounts of data to be gathered. This could provide information that reaches beyond the topic or construct that is explored.

This study aimed to describe the factors that affect the academic success of students in the Faculty of the Humanities (quantitative section of the study). These results could be described in more depth through students' experiences of academic success (qualitative section of the study).

4.2.3 Mixed-methods design. For more than a century, opposing views have existed regarding the superiority of either the quantitative or qualitative paradigms of research. Largely, these two paradigms have been viewed as opposite and incompatible. However, the mixed-methods design permits the integration of the two paradigms. Furthermore, by making use of a mixed-methods approach, the researcher is able to draw

from the strengths of both quantitative and qualitative research methods, while the weaknesses of both these methods can be minimised (Johnson & Onwuegbuzie, 2004; Teddlie & Tashakkori, 2009).

Quantitative research is characterised best by an analytical approach to the data that are gathered. This approach always utilises the numerical analysis of data. Quantification is based on the positivistic paradigm, which relies on standardised situations, observable measurements, and testable hypotheses (Teddlie & Tashakkori, 2009). Furthermore, owing to the necessity to be able to perform statistical procedures on the data, the data are usually collected in a highly structured manner (Johnson & Harris, 2002). Researchers that make use of this framework are of the opinion that an ultimate truth can be discovered if the correct techniques are utilised and that these truths can be generalised to the greater population (Cheek, Onslow, & Cream, 2004). Lastly, quantitative research focuses on universal laws of cause and effect and consequently assumes an explanatory paradigm (Bless, Higson-Smith, & Kagee, 2006).

On the other hand, qualitative research is defined as a method that aims to explore and understand social and cultural contexts, along with the processes that result in behavioural patterns. This approach is based on an interpretive paradigm (Maree, 2009). According to Johnson and Harris (2002), data are collected in the form of words and observations (as opposed to numbers, as is the case in quantitative research), and analysis is based on the interpretation of the data (as opposed to statistical manipulation, as is the case in quantitative research). Researchers who support the qualitative paradigm view a distant relation with the phenomena that are being studied as impossible and undesirable and prefer personal involvement in the process (Johnson & Onwuegbuzie, 2004). As opposed to quantitative methods, in qualitative studies, individual experiences of reality are explored to gain understating of reality, and knowledge is made up of the different beliefs, values, and assumptions of individuals. According to Berg (2009), Denzin and Lincoln (2005), Neuman (2011) and Patton (2002), the goal of qualitative research is to understand and interpret participants' perspectives and experiences as obtained from their everyday environments.

Onwuegbuzie and Leech (2005) proposed the use of a mixed-methods design in which both quantitative and qualitative paradigms are viewed as opposite sides of an interactive continuum. This view allows for the possibility that the two approaches can complement each other. Strengths of a mixed-methods design include the fact that narratives can add meaning

to numbers and statistics, while numbers and statistics can add precision to narratives (Johnson & Onwuegbuzie, 2004). Furthermore, this approach can answer a broader and more complete range of research questions because the researcher is not confined to a single approach. By making use of a mixed-methods design, the researcher can utilise the strengths of one method to compensate for the weaknesses of the other. Moreover, by using both approaches, stronger evidence can be provided through the convergence and collaboration of findings. The use of a mixed-methods design can also be viewed as a strategy to create triangulation, which is the combination of multiple methods in an effort to create results that are more valid. Therefore, by making use of triangulation, the phenomena are viewed from different perspectives, which will enable the researcher to challenge any biases that might exist (Baban, 2008). Lastly, insight and understanding that might be missed when using only one approach can be ensured, and it is more likely that the results can be generalised when a mixed-methods design is used. Teddlie and Tashakkori (2006) stated that a mixed-methods research design is very diverse because the different approaches can inform each other and lead to more detailed information.

In terms of triangulation, Denzin (1978), who was the first to point out how to triangulate methods, summarised four types of triangulation, namely data triangulation (making use of a variety of sources in a study), investigator triangulation (utilising several different researchers), theory triangulation (the use of various perspectives and theories to interpret the results of a study), and methodological triangulation (making use of multiple methods to study a research problem). Furthermore, two types of methodological triangulation are indicated, namely simultaneous and sequential triangulation (Johnson, Onwuegbuzie, & Turner, 2007). Simultaneous triangulation represents the use of quantitative and qualitative methods at the same time. When using this approach, limited interaction between the two sources of data exist during the data-collection stage, but during the data interpretation, source findings complement one another. Conversely, sequential triangulation is used when the results of one approach are necessary for planning of the next method (Johnson et al., 2007; Teddlie & Tashakkori, 2006). During this study, the researcher used data triangulation by utilising data gathered from the test battery (quantitative section) and focus group discussions (qualitative section). Moreover, simultaneous triangulation was used because of the limited interaction that existed during data gathering. However, the data that were gathered through the two sections informed and complemented one another during the interpretation of the data.

In contrast to the previous statements, critics of mixed-methods designs are of the opinion that quantitative and qualitative paradigms are at different ends of the spectrum and should not be combined. They postulate that the incompatibility of these methods do not allow for the successful combination of the two (Borrego, Douglas, & Amelink, 2009). According to Johnson and Onwuegbuzie (2004), weaknesses of the mixed-methods approach include that it might be challenging for a single researcher to carry out both approaches, and a team of researchers may be necessary to collect data. Moreover, researchers would have to learn about multiple approaches and understand how to combine them successfully. By making use of a mixed-methods design, the research could be more extensive and time-consuming. Lastly, some of the details of a mixed-methods approach remain to be fully worked out by research methodologists (e.g., problems of paradigm mixing and how to interpret conflicting results).

A mixed-methods approach was selected for this study because it allowed the combination of the strengths of the quantitative and qualitative paradigms. The quantitative data that were received from the questionnaires enabled the researcher to examine the effect of various variables on students' academic success. However, the complexity of predicting academic success was indicated in the previous chapters, and the qualitative inquiry enabled the researcher to gather valuable information regarding students' experiences related to academic success.

4.3 Research Participants and Sampling Procedures

The population of interest in the present study was students from both genders, all race groups, and all age groups in their first to fifth years of study in the Faculty of the Humanities at the UFS. Performance in different faculties is not homogeneous due to differences in the type of modules and study material and the difficulty levels thereof. Therefore, academic success in a physical science module will not be similar to success in a language module (CHE, 2009; Leppel, 2001). Consequently, to demarcate the sample, only students from the Faculty of the Humanities were included in the study. Moreover, the Faculty of the Humanities is typically the largest faculty at most HE institutions and would offer the biggest population of students (DHET, 2014a). The different sampling methods that were utilised to select participants for the quantitative and qualitative sections of the study are discussed next.

4.3.1 Quantitative sampling procedures. A non-probability sampling method was utilised in the quantitative section of the research (Howell, 2004). Griesel (2006) stated that a disadvantage of the use of non-probability sampling methods is the fact that it might not be a true representation of the bigger population that is being studied. However, in cases where large amounts of information have to be examined, this method may be relevant. Moreover, Burns and Grove (2004) were of the opinion that this method does not allow the researcher to control for any prejudices because participants are simply part of the study because they were in the right place at the right time. They proposed that this challenge can be managed when the researcher identifies any such prejudices and takes steps to overcome these to ensure a sample that is more representative of the total population. The researcher attempted to control prejudices by comparing the sample with the actual student population of the HE institution to ensure that the sample would be a good representation of the general population. Moreover, Burns and Grove (2004) identified the fact that this sampling method is relatively cost effective and uncomplicated as advantages of non-probability sampling. Furthermore, they proposed that this sampling method is often used effectively in descriptive or correlation studies. As mentioned in the section above, this study is a descriptive research study in which large amounts of data were examined; thus, making use of non-probability sampling methods would be relevant and useful.

At the beginning of the research study, a list was compiled of all students registered in the Faculty of the Humanities. To obtain data from as many students as possible, e-mail invitations were sent out to the entire cohort of students in the Faculty of the Humanities. This cohort comprised 5338 students who were enrolled in the faculty during the particular year. All the students who completed the online questionnaire formed part of the final sample. The sample consisted of 229 participants, with a response rate (comparing the number of respondents to the entire cohort of students) of 4.31%. According to Manfreda, Bosnjak, Berzelak, Haas, and Vehovar (2008), internet or online surveys are becoming increasingly popular, but their response rates are typically lower than that of traditional survey methods. Nulty (2008) stated that online response rates can vary from 10% to as high as 50%, depending on the type of research and the population group that is studied. He adds that whether or not a response rate is adequate depends (in part) on how the data will be utilised and analysed. He postulates that it might be more correct to ask whether the sample size is adequate. Dillman (2000) and Nulty (2008) asserted that it is important to consider any sampling biases that might occur because of differences in responses due to differences in

characteristics of respondents and non-respondents. The response rate of this study was relatively low, possibly due to the length of the questionnaire. This aspect is discussed in more detail in the section on limitations of this study.

The biographic information of the 229 participants that took part in the quantitative section of the study and the demographics of the total population are summarised in Table 2.

Table 2

Biographic Information of the Sample for the Quantitative Section of the Study

Biographic Information	Sample		Population		
	N	%	N	%	
Gender	Male	64	27.8%	1670	31.29%
	Female	164	71.3%	3668	68.71
	Not answered	1	0.87%	0	0%
	Total	229	100%	5338	100%
Age	Younger than 23	132	57.4%	3407	63.83%
	23 and older	92	40%	1931	36.71%
	Not answered	5	2.6%	0	0%
	Total	229	100.0%	5338	100.0%
Ethnic group	Black	170	73.9%	3998	74.88%
	Asian	1	0.4%	42	0.79%
	Coloured	8	3.5%	350	6.56%
	White	44	19.1%	948	17.75%
	Indian	1	0.4%	0	0%
	Other	1	0.4%	0	0%
	Prefer not to answer	3	1.3%	0	0%
	Not answered	1	0.9%	0	0%
Total	229	100%	5338	100%	
Race group	Designated group	180	78.6%	4390	82.25%
	White	44	19.2%	948	17.75%
	Not answered	5	2.2%	0	0%
	Total	229	100%	5338	100%
Year of study	1st year	51	22.3%		
	2nd year	39	17.0%		
	3rd year	35	15.3%		
	4th year	44	19.2%		
	5th year	60	26.2%		
	Total	229	100%		

According to Table 2, 64 male and 164 female students participated in the quantitative study. This ratio of male participants (27.8%) and female participants (71.3%) corresponds with the population ratio (male 31.29%; female 68.7%) of students enrolled in the Faculty of

the Humanities. It is clear that more female students than male students are enrolled in the Faculty of the Humanities.

The largest part of the sample appeared to be younger than 23 (57.4%), while 40% of participants indicated that they were 23 and older. Therefore, more traditional students than mature students took part in the quantitative study. Once again, these percentages appear to be similar to that of the total population of students in this faculty (63.83% of students are younger than 23, and 36.7% of students are 23 years and older.)

Of the 229 participants included in the sample, 170 (73.9%) were black, 44 (19.1%) were white, and eight (3.5%) were coloured. Furthermore, one Asian and one Indian student took part in the study, while one student was of a race not provided for in the questionnaire, and three participants preferred not to indicate their ethnicity. The sample is an adequate representation of the ethnic distribution of the total population of students: 74.88% black students, 17.75% white students, 6.56% coloured students, and 0.79% other. When grouping students together, white students represented 19.1% of the sample, while participants from the designated group constituted 78.6% of the sample. Similar to the discussion on the individual ethnic groups, these numbers correspond with those of the total population of students.

Furthermore, with regard to year of study, the participants were relatively evenly spread over the five years. Fifth-year students made up the highest percentage of participants at 26.2%, followed by first-year students (22.3%). Second- (17.0%), third- (15.3%) and fourth- year (19.2%) students made up the remaining 51.5% of participants.

4.3.2 Qualitative sampling procedures. During the qualitative section of data collection, a purposive sampling method was utilised to obtain focus group participants. The aim of purposive sampling is to acquire rich sources of information that can provide information relevant to the research question (Patton, 2002; Stake, 2005). During a purposive sampling method, specific criteria that will enable a detailed exploration and understanding of the themes and questions that will be explored are used when selecting individuals (Bryman, 2012; Patton, 2002). The first aim of purposive sampling is to guarantee that all the most important aspects relevant to the subject matter are explored. The second goal of this method is to ensure that enough variety is included within each of the key criteria so that the influence of the aspect concerned can be explored (Ritchie, Lewis, Elam, Tennant, & Rahim, 2014). According to Macnee and McCabe (2008), an advantage of purposive sampling is that it will

enrich data by including the experiences of individuals that have a certain experience, characteristic, or understanding regarding the phenomenon that is being studied. On the other hand, they warned that by using this sampling method, researchers could focus the data collection prematurely on one experience or understanding and thereby miss the broader range of data.

Students were selected for the qualitative section of the research based on their participation in the quantitative section. All students who participated in the quantitative section of the research study received an e-mail that gave information regarding the purpose of the focus groups and invited students to participate. From the students who indicated their willingness to participate, participants were sampled purposively to include students from both genders, different ethnic groups, and students below and above 23 years of age. The selected students participated in one of the six focus group sessions that were conducted. In Table 3, the biographic information of the qualitative sample is summarised.

Table 3

Biographic Information of the Sample for the Qualitative Section of the Study

Biographic Information		Focus Group						Total Sample	Total Sample
		1 N	2 N	3 N	4 N	5 N	6 N	N	%
Gender	Male	3	2	2	0	0	4	11	42.30%
	Female	3	3	0	4	4	1	15	57.69%
	Total	6	5	2	4	4	5	26	100%
Age	Younger than 23	5	5	1	4	4	2	21	80.77%
	23 and older	1	0	1	0	0	3	5	19.23%
	Total	6	5	2	4	4	5	26	100%
Ethnic group	Black	6	5	2	4	4	3	24	92.31%
	Asian	0	0	0	0	0	0	0	0%
	Coloured	0	0	0	0	0	1	1	3.85%
	White	0	0	0	0	0	1	1	3.85%
	Indian	0	0	0	0	0	0	0	0%
	Other	0	0	0	0	0	0	0	0%
	Prefer not to answer	0	0	0	0	0	0	0	0%
	Total	6	5	2	4	4	5	26	100%

According to Table 3, 11 male and 15 female students were part of the qualitative section of the study. Slightly more females participated in the qualitative study. In terms of the composition of the various focus groups, two groups had almost equal numbers of males and females, one group consisted solely of male participants, two groups were exclusively female and the last group had mostly males (with one female participant).

Once again resembling the quantitative sample, the largest proportion of students (80.77%) indicated that they were younger than 23 years of age, while only 19.23% of students were 23 years and older. In terms of the ages of participants in each focus group, four of the six groups had more participants who were younger than 23 years of age, while two of the groups had an almost equal mix of participants who were younger than 23 and participants older than 23 years of age.

In terms of ethnicity, of the 26 students who took part in the qualitative study, 24 (92.31%) were black, with one (3.85%) white and one (3.85%) coloured participant. No students from any other ethnic group were part of the study. Therefore, it would seem that most of the focus groups were homogenous in terms of ethnicity. If these numbers are compared to the total population of students in the Faculty of the Humanities where 74.88% of students are black, 17.75% are white, 6.56% are coloured and 0.79% are of other ethnic groups, it is apparent that black students might be overrepresented in the qualitative section of the study, while other students were underrepresented. This limitation is discussed in more detail later in this study.

4.4 Procedures of Data Collection

In this section, the different methods that were utilised during the quantitative and qualitative sections of data collection are discussed.

4.4.1 Quantitative data-collection procedures. To measure each of the constructs, data were obtained from several different sources. Students who participated in the study received a battery of questionnaires to complete. This battery included an information document (see Appendix A), a biographic section, and several measuring instruments. Furthermore, additional information was obtained from students' profiles from the UFS Student Academic Services. These measures and procedures are discussed in more detail below.

4.4.1.1 Academic success. According to York et al. (2015), academic success remains one of the most widely used and measured constructs in education research and assessment in HE, despite the complexity and lack of clarity of the construct. They stated that, although single scores for specific modules are used at times as an indicator of academic performance, average scores across various modules are used most widely to operationalise

academic success. Furthermore, Howell (2004) stated that, by making use of average scores rather than individual module scores, a better indication of a specific factor can be obtained.

In this study, students' academic success was operationalised by considering their average academic performance in the core modules of the academic programmes for which they were registered during the specific year.

Each student's academic record was obtained. Their final marks (expressed in percentage) in each of the core modules (e.g., Psychology, Sociology, Criminology, and Communication Studies) for which they were registered during the year in which the data were gathered were considered. Elective and developmental modules (such as academic and mathematical literacy modules) were not considered. Both semester and year modules' marks were included. Since academic success was considered as a continuous variable, any mark from 0 to 100 was considered (i.e., successfully completed and failed modules were considered). The average mark was calculated for each student.

4.4.1.2 Pre-enrolment factors. As conceptualised in chapters 2 and 3, pre-enrolment factors can be defined as the characteristics, backgrounds and experiences that students possess before they begin with their HE careers (Engstrom, 2008; Kuh et al., 2006; Tinto, 1993). As depicted in Figure 17, the pre-enrolment characteristics in the pre-enrolment stage regarded as relevant in this study were categorised into demographic attributes (age, gender, and race/ethnicity), previous academic experiences (language proficiency, Grade 12 performance, and high school attended), and family background (parental levels of education). The operationalisation of each of these variables is explained next.

a. Age. When considering age, participants had to indicate if they were younger than 23 years of age or 23 years and older. This classification fits into the CHE's (2010) view that students younger than 23 years are regarded as traditional students and students 23 years and older as mature/non-traditional students.

b. Gender. In terms of their gender, participants had to indicate if they were male or female.

c. Race/Ethnicity. Race/ethnicity was determined by requesting participants to indicate if they were black African, Asian, Coloured, White, Indian, Multiracial, or Other.

Participants' right to not divulge racial information was respected by including the option "I prefer not to answer." While ethnicity was considered in the descriptive statistical analysis, participants were categorised into either a white group or a designated group during the inferential statistical procedures.

d. Language proficiency. Firstly, participants were requested to indicate both their home language and the medium of instruction at the UFS (English and Afrikaans were the two languages of instruction at the UFS). This information made it possible to determine whether participants were receiving tuition in their first language or not.

In addition to the above, results of the Academic Literacy Test, which forms part of the National Benchmarking Tests (NBT) Project (Higher Education South Africa, 2009) were used to operationalise participants' language proficiency. All HE students are required to write this test (available in English and Afrikaans) at the beginning of their first academic year. Benchmarks have been determined through a rigorous national consultation and test design process (Wilson-Strydom, 2011). These benchmarks make it possible for HE institutions to understand the levels of preparedness of their students. The NBT was designed to provide HE institutions with additional results that will assist them in student admission and placement, aid in the assessment of students' mathematical and literacy proficiency, and provide an assessment between school-level exit outcomes and entry-level skills of students. (Du Plessis & Gerber, 2012).

The Academic Literacy Test measures seven skills: Firstly, students must be able to make meaning from academic texts. Secondly, an understanding of vocabulary related to academic study is important, and thirdly, students should be able to evaluate evidence used to support the facts. Next, students must be able to extrapolate and draw inferences and conclusions from text, and fifthly, they must be able to differentiate main ideas from supporting ideas in the overall organisation of a passage. In the sixth place, students should be able to identify differences in texts as related to writers' purposes, audiences, and forms of communication. Lastly, students are expected to understand how syntax and punctuation are used to express meaning and understand basic numerical concepts used in the text (Du Plessis & Gerber, 2012; Higher Education South Africa, 2009). Three performance levels can be obtained on the Academic Literacy Test (Higher Education South Africa, 2009): Proficient performance (scores between 65% and 100%) implies that students' can be placed in regular programmes of study and that they are expected to meet the demands of mainstream academic

programmes. Intermediate performance (scores between 42% and 64%) indicate that additional assistance is required to meet the educational needs of students (e.g., extended or augmented programmes, and provision of special skills). Basic performance (scores below 42%) suggest serious learning challenges, and it is expected that students will not cope with the demands of mainstream programmes without extensive long-term support (e.g., through bridging courses or FET colleges).

Although the intention in this study was to calculate participants' language proficiency by using their scores in the Academic Literacy Test of the NBT, many of the participants' results were not available from Student Academic Services. Therefore, NBT results were considered for the descriptive statistics, but could not be used during the inferential analyses. As an alternative, indications of whether participants received tuition in the home language or not were used to operationalise language proficiency.

e. Grade 12 performance. This variable was quantified by making use of students' official admission points (APs). Admission to the UFS is based on a score that is calculated by making use of students' Grade 12 performance in the National Senior Certificate (see Table 4) (UFS, 2014).

Table 4

Calculation of Admission Points

Grade 12 (National Senior Certificate) level of performance in each school subject	AP
90%-100%	8
80%-89%	7
70%-79%	6
60%-69%	5
50%-59%	4
40%-49%	3
30%-39%	2

Note. Adapted from http://openlearning.ufs.ac.za/dl/Userfiles/Documents/ooooo/42_eng.pdf. Copyright 2015 by the University of the Free State. Reprinted with permission.

It is important to note that the table above applies to all Grade 12 subjects except Life Orientation. Students can earn one (1) point for passing the subject Life Orientation with an achievement level of 5 and higher. Therefore, for example, according to this system, a student who obtained 65% for all the Grade 12 subjects will have an AP score of $6 \times 5 + 1 = 31$.

Students with an AP of above 28 are entered into the mainstream curriculum (three-year curriculum), while students with an AP of between 23 and 27 are admitted to the extended curriculum (four-year curriculum).

f. High school attended. Participants were asked to indicate the type of high school they attended. They had to choose between *non-fee-paying public schools, fee-paying public schools, and private schools.*

In SA, all public schools are categorised into five groups or quintiles. The purpose of this classification system is largely for the allocation of financial resources. Quintile 1 is the “poorest”, while Quintile 5 is the “least poor”. These rankings are determined nationally based on the poverty of the community around the school and infrastructural factors. Currently, schools that fall within the first three quintiles are classified as non-fee-paying schools, whereas schools in the fourth and fifth quintile are fee-paying schools (Minister of Education, 2013).

For the purpose of this study, the assumption was that students from non-paying public schools would have had less access to educational resources and possibly poorer standards of education during their high school years, and could therefore be less prepared for the HE environment than their peers from fee-paying public schools, whereas students from private schools would have the most access to educational resources. For the inferential analyses, this variable was operationalised into a dichotomous variable, with participants from non-fee-paying schools on the one hand and participants from fee-paying and private schools on the other.

g. Parental levels of education. This variable was quantified by making use of two questions in the biographical questionnaire. Firstly, participants were asked who their primary caregivers were/are. They could indicate their mother, father, or another person. Secondly, participants were required to indicate the highest level of education that their primary caregiver had obtained. Here the options were as follows: Did not attend school at all; Primary phase (Grade 1-3); Intermediary phase (Grade 4-6); Senior phase (Grade 7-9); Further education training (Grade 10-12); Higher education (technicon, college, university). For the inferential analyses, this variable was operationalised into a dichotomous variable, with first- and continuous-generation participants.

4.4.1.3 Post-enrolment factors. In chapters 2 and 3, post-enrolment factors are explained as factors that play a role in academic success after students have enrolled for and entered the HE context (Fraser & Killen, 2003). As can be seen in Figure 17, these post-enrolment factors include variables related to the stage of entering HE, the HE experience stage, and the ongoing integration stage. Although the importance of the ongoing integration stage is acknowledged from a theoretical point of view, this last stage was excluded from the current study, seeing that aspects such as academic outcomes (e.g., intellectual and academic development) and psychological outcomes (e.g., subsequent educational goals) are not relevant to students in the earlier stages of their HE experience (such as the first-year participants in this study). Therefore, the post-enrolment factors that considered for this study were as follows: For the entry into HE stage, initial educational goals, initial commitment to the HE institution, physical energy devoted to HE activities, psychological energy devoted to HE activities, and academic self-concept were included. For the HE experience stage, three groupings of variables, namely academic integration (participation in academic activities, academic contact with staff, and academic contact with peers), social integration (participation in extracurricular activities, non-academic contact with staff, non-academic contact with peers, and living arrangements) and external factors (financial responsibilities, family responsibilities, and employment responsibilities) were included. The operationalisation of each of these will be explained in the following paragraphs.

a. Initial educational goals. Data regarding students' initial educational goals were gathered by making use of the *Goal Commitment Scale* (Hollenbeck, Klein, O'Leary, & Wright, 1989). This scale was developed specifically to measure how committed students enrolled in HE are to their goals of completing their qualification. The *Goal Commitment Scale* consists of nine items that are answered according to a four-point Likert scale. This scale includes the four options: strongly disagree (1), disagree (2), agree (3), and strongly agree (4). The *Goal Commitment Scale* does not include any subscales; therefore, only a total score would be obtained. Participants with low scores (with the lowest possible score being 9) have low levels of commitment to their educational goals, whereas participants who get high scores (where the highest achievable score is 36) on the scale have high levels of commitment to attain their educational goals. In the test battery, the scale was introduced by the following statement: "*Listed below are a number of statements regarding your goal of obtaining a degree AT THE BEGINNING OF YOUR UNIVERSITY CAREER. Rate each item as it pertains to YOU personally. Base your ratings on how you feel MOST OF THE TIME. Be*

sure to answer all questions. Also try to answer each question independently; do not be influenced by your previous choices.” An indication of the items included in the scale are summarised in Table 5 (questions that are scored in reverse are indicated by an *).

Table 5

Goal Commitment Scale

a) It's hard to take this goal seriously.*
b) It's unrealistic for me to expect to reach this goal.*
c) It is quite likely that this goal may need to be revised, depending on how things go.*
d) Quite frankly, I don't care if I achieve this goal or not.*
e) I am strongly committed to pursuing this goal.
f) It wouldn't take much to make me abandon this goal.*
g) I think this goal is a good goal to shoot for.
h) I am willing to put forth a great deal of effort beyond what I'd normally do to achieve this goal.
i) There is not much to be gained by trying to achieve this goal.*

Note. Adapted from “The assessment of goal commitment: A measurement model meta-analysis.”, by H.J. Klein, M. J. Wesson, J. R. Hollenbeck, P. M. Wright and R. P. DeShon, 2001, *Organizational Behavior and Human Decision Processes*, 85, p. 34. Copyright 2001 by Ideal Library. Adapted with permission.

Hollenbeck et al. (1989) pointed out that the *Goal Commitment Scale* has an internal reliability of 0.71 for students in American HE institutions. In addition, during their meta-analysis of the scale, Klein, Wesson, Hollenbeck, Wright, and DeShon (2001) showed that the scale had a good overall reliability and indicated alpha coefficients of above 0.7 for 17 different groups of students.

b. Initial commitment to the HE institution. Students' commitment to the specific HE institution (UFS) was measured by making use of the *University Commitment Scale* (Rothwell, Herbert, & Rothwell, 2008). This instrument measures the extent to which students are committed to study at a specific HE institution. The *University Commitment Scale* consists of seven items that are answered according to a four-point Likert-scale. This scale includes four options: strongly disagree (1), disagree (2), agree (3), and strongly agree (4). One total score is obtained by participants, with lower scores (the lowest score being 7) indicating lower levels of commitment and higher scores (the highest score being 28) indicating higher levels of commitment to the specific HE institution. The scale was introduced as follows in the test battery: “Listed below are a number of statements regarding your opinions of the University of the Free State AT THE BEGINNING OF YOUR FIRST YEAR AT UNIVERSITY. Rate each item as it pertains to YOU personally. Base your ratings on how you feel MOST OF THE TIME. Be sure to answer all questions. Also try to answer each question independently; do

not be influenced by your previous choices.” The items of the scale are shown in Table 6. No reverse score items are included in this questionnaire.

Table 6

University Commitment Scale

a) I talk up this university to my friends as a great university to be at.
b) I find that my values and this university's values are very similar.
c) I am proud to tell others that I am at this university.
d) Being at this university really inspires the best in me in the way of study performance.
e) I am extremely glad I chose this university over others I was considering at the time I joined.
f) I really care about this university and its future.
g) For me, this is the best of all universities to be a member of.

Note. Adapted from “Self-perceived employability: Construction and initial validation of a scale for university students”, by A. Rothwell, I. Herbert, and F. Rothwell, 2008, *Journal of Vocational Behavior*, 73, p. 8. Copyright 2008 by Elsevier. Adapted with permission.

Rothwell et al. (2008) indicated that the alpha coefficient for the items of the *University Commitment Scale* was 0.87 for students enrolled in American HE institutions. Moreover, Chou and Shen (2012) found the Cronbach alpha coefficient for the items of the scale was 0.88 among students enrolled at HE institutions in Taiwan.

c. Physical energy devoted to HE activities. The physical energy that participants devoted to HE activities was measured by making use of a section of the *South African Survey of Student Engagement (SASSE)* (Strydom & Mentz, 2010). This specific section was aimed at exploring the level to which students were committed to their academic career and amount of physical energy they devoted to their academic careers. This section consisted of six questions that were answered according to a four-point scale. The answer options were the following: never (1), sometimes (2), often (3), very often (4). The lowest obtainable score for this scale is 6, and the highest obtainable score is 24, with a low score indicating lower levels of physical energy devoted to their academic career and a high score indicating high levels of physical energy devoted to their studies. The last item of the questionnaire was reverse-scored. The items were introduced by making use of the following statement: “*Think about the current academic year. How often have you...*” Items of the scale are indicated in Table 7 (with reverse-scored items marked with an *).

Table 7

South African Survey of Student Engagement: Physical Energy Devoted to HE Activities

a) Asked questions in class or contributed to class discussions?
b) Made a class presentation?
c) Prepared two or more drafts of a paper or assignment before handing it in?
d) Worked on an assignment or project that required integrating ideas or information from various sources?
e) Included diverse perspectives (different races, religions, genders, political beliefs, etc.) in class or written assignments?
f) Attended class without having completed readings or assignments?*

Note. Adapted from “Enhancing success in South Africa’s higher education: Measuring student engagement”, by J. F. Strydom, G. D. Kuh and M. Mentz. 2010, *Acta Academia*, 42, p. 49. Copyright 2010 by Council on Higher Education. Adapted with permission.

The alpha coefficients for the items of this survey were calculated as between 0.75 – 0.85 for SA students by Strydom et al. (2010). However, since only parts of the *SASSE* were utilised, the validity and reliability may be compromised. This limitation will be discussed in more detail in the limitations section of the study.

d. Psychological energy devoted to HE activities. The *School Achievement Motivation Rating Scale* (Chiu, 1997) was used to measure the psychological energy that students devoted to their academic activities. This scale measures students’ motivation to achieve academic success and consists of 12 questions that are answered on a five-point scale. Answer options include the following: never (1), seldom (2), occasionally (3), frequently (4), and always (5). The lowest score that participants can achieve is 12, while the highest score is 60. Low scores indicate lower levels of psychological energy/motivation, while higher scores are indicative of higher levels of psychological energy/motivation to achieve success. Three of the questions are scored in reverse. In the test battery, this scale was introduced as follows: “*Listed below are a number of statements regarding academic-related attitudes. Rate each item as it pertains to YOU personally. Base your ratings on how you feel MOST OF THE TIME.*” The items of the scale are shown in Table 8 (questions that are scored in reverse, are marked with an *).

Table 8

School Achievement Motivation Rating Scale

a)	I choose to do extra work, beyond what is expected of me.
b)	I am usually not prepared for class.*
c)	I will stick with a task until it is completed.
d)	I will try to solve problems that other students struggle with.
e)	I will ask questions to understand study material or assignments better.
f)	I usually choose not to complete homework or assignments.*
g)	I usually participate in class discussions and activities.
h)	I usually hurry to complete assignments and then make careless mistakes.
i)	I will do a task over again, just to get it perfect.
j)	I usually try to avoid competitive situations in class.
k)	I am enthusiastic about my studies.
l)	If there were a chance that I might fail, I would rather not try something new.*

Note. Adapted from "Development and validation of the School Achievement Motivation Rating Scale", by L. H. Chiu, 1997, *Education and Psychological Measurement*, 57, p. 300. Copyright 1997 by PsychTESTS. Adapted with permission.

The test-retest reliability of this scale was measured as $r = 0.91$ among American high school students (Chiu, 1997).

e. Academic self-concept. Data regarding students' academic self-concept were gathered by making use of the *Academic Self-Concept Scale (ASCS)* (Reynolds, 1988). This scale measures academic self-concept of students enrolled at HE institutions. The ASCS consists of 40 items that are answered according to a four-point Likert-scale. This scale includes four options, namely strongly disagree (1), disagree (2), agree (3), and strongly agree (4). The ASCS does not include any subscales; therefore, only a total score is considered. Scores can range from a lowest possible score of 40 to a highest possible score of 160. High scores on the ASCS indicate a strong academic self-concept, while low scores reflect a poor academic self-concept. In the test battery, the scale was introduced by the following statement: "Listed below are a number of statements regarding academic-related attitudes. Rate each item as it pertains to YOU personally. Base your ratings on how you feel MOST OF THE TIME. Be sure to answer all questions. Also try to answer each question independently; do not be influenced by your previous choices." In Table 9, an example of the items of the ASCS is provided. Items that are scored in reverse are indicated by an *.

Table 9

Academic Self-Concept Scale

a)	Being a student is a very rewarding experience.
b)	If I try hard enough, I will be able to get good grades.
c)	Most of the time my efforts in university are rewarded.
d)	No matter how hard I try, I don't do well in university.*
e)	I often expect to do poorly in the exams.*
f)	All in all, I feel that I am a capable student.
g)	I do well in my modules, given the amount of time I dedicate to my studying.
h)	My parents are often not satisfied with my marks at university.*
i)	Others view me as intelligent.
j)	Most modules are very easy for me.
k)	Sometimes I feel like dropping out of university.*
l)	Most of my classmates do better at university than I do.*
m)	Most of my instructors think that I am a good student.
n)	At times I feel that university is too difficult for me.*
o)	All in all, I am proud of my marks at university.
p)	Most of the time, when I take a test, I feel confident.
q)	I feel capable of helping others with their class work.
r)	I feel that the lecturers' standards are too high for me.*
s)	It is hard for me to keep up with my class work.*
t)	I am satisfied with the class assignments that I hand in.
u)	At times I feel like a failure.*
v)	I feel I don't study enough before a test.*
w)	Most exams are too easy for me.
x)	I have doubts that I will do well in my modules.*
y)	For me, studying hard pays off.
z)	I have a hard time getting through university.*
aa)	I am good at scheduling my time.
bb)	I have a fairly clear sense of my academic goals.
cc)	I'd like to be a much better student than I am now.*
dd)	I often get discouraged about university.*
ee)	I enjoy doing my academic work.
ff)	I consider myself a very good student.
gg)	I usually get the grades I deserve in my modules.
hh)	I do not study as much as I should.*
ii)	I usually feel on top of my work by finals week.
jj)	Others consider me a good student.
kk)	I feel that I am better than the average university student.

Note. Adapted from "Generalized expectancies for internal versus external control of reinforcement" by J. B. Rotter, 1966, *Psychological Monographs*, 80, pp 11-12. Copyright 1966 by the American Psychological Association. Adapted with permission.

In his work, Reynold (1988) indicated that the ASCS had an internal reliability of 0.91 for undergraduate students in American HE institutions. In their study, Cokley, Komarraju, King, Cunningham, and Muhammad (2003) reported an alpha coefficient of 0.95 for white American students and an alpha coefficient of 0.91 for black American students. Van der

Westhuizen (2008) found an alpha coefficient of 0.89 among students in her South African study.

In this study, during the capturing of the ASCS in the electronic survey, one of the items was omitted by mistake; therefore, the final ASCS in this study contained only 39 questions (with a lowest possible score of 39 and a highest possible score of 156). This should be kept in mind during the interpretation of the results.

f. Participation in academic activities. Students' academic contact with peers was examined by making use of two sections of the *SASSE* (Strydom & Mentz, 2010), namely time spent on scheduled academic activities, and time spent on homework tasks, assignments and preparing for classes. Firstly, participants were required to provide an estimation of the number of hours per week they spent on scheduled academic activities (e.g., lectures, practicals, and tutorials). They could choose between the following options: None (scored 1); 1-5 hours (scored 2); 6-10 hours (scored 3); 11-15 hours (scored 4); 16-20 hours (scored 5); 21-25 hours (scored 6); 26-30 hours (scored 7); or more than 30 hours (scored 8).

Secondly, participants were asked to report on the number of hours per week they spent on homework tasks, assignments, and preparing for classes. They were given the same time-frame options as above.

These two scores were combined to obtain the time that students devoted to academic activities (with a score range from 2 to 16).

It is acknowledged that self-report measures are not the most reliable method of operationalisation because participants tend to respond in a socially desirable manner and present themselves more favourably (Dodorico McDonald, 2009). Yet, it was not practically possible to obtain class registers for all students who took part in the study since accurate attendance records for all core modules in the Faculty of the Humanities were not available. This limitation is discussed in more detail in the limitations section of this study.

g. Academic contact with staff. The *Professor-Student Rapport Scale* (Wilson, Ryan, & Pugh, 2010) was utilised to determine the academic interaction between students and lecturers. This scale gives an indication of students' perceptions of the interactions and relationships with their lecturers. The scale consists of 25 items, of which 14 were used to indicate the academic interactions between students and staff, while the remaining 11 items

were used to indicate social interactions between students and staff (see the sections below). This scale requires answers on a five-point scale, ranging from strongly disagree (1), disagree (2), neutral (3), agree (4), to strongly agree (5). The higher the score is, the better the relationships and interactions between students and staff is. The lowest obtainable score was 14, while the highest score that participants could achieve was 70. The scale was introduced as follows in the questionnaire: “Listed below are a number of statements concerning your views about your lecturers. Rate each item as it pertains to YOU personally. Base your ratings on how you feel MOST OF THE TIME.” Items that were included in this study are indicated in Table 10. Items that were scored in reverse are indicated by an *.

Table 10

Professor-Student Rapport Scale (Academic Contact)

a)	Most of my lecturers and I get along.
b)	Most of my lecturers are not helpful.*
c)	I understand what my lecturers expect of me.
d)	Most of my lecturers are aware of the amount of effort I am putting into my classes.
e)	My lecturers are mentors to me.
f)	My lecturers encourage questions and comments from students.
g)	My lecturers are approachable.
h)	My lecturers make class enjoyable.
i)	My lecturers’ body language says, “Don’t bother me.”*
j)	My lecturers and I communicate well.
k)	My lecturers are willing to help students.
l)	My lecturers encourage me to succeed.
m)	My lecturers enjoy their jobs.
n)	My lecturers will spend extra time going over a concept if students need it.

Note. Adapted from “Professor-student rapport scale predicts student outcomes”, by J. H. Wilson, R. Ryan and J. L. Pugh, 2010, *Teaching of Psychology*, 37, p. 249. Copyright 2010 by PsychTESTS. Adapted with permission.

Wilson et al. (2010) indicated a high Cronbach alpha (0.96), while Ryan, Wilson and Pugh (2011) tested the scale for internal consistency and test-retest reliability and reported an alpha coefficient of 0.89 and a test-retest reliability of $r = 0.72$ for students at a south-eastern American university.

h. Academic contact with peers. Students’ academic contact with peers was examined by making use of a section of the SASSE (Strydom & Mentz, 2010). Participants were requested to answer statements regarding their academic interaction with peers on a four-point scale including the options never (1), sometimes (2), often (3), and very often (4). The lowest score that participants could achieve was 5, and the highest score was 20. Participants with higher scores perceived their academic interactions with peers as more

positive than their counterparts with lower scores did on these items. No items were reverse-scored in this section. The questions were introduced with the following statement: “*Think about the current academic year. How often have you...*” The items that formed part of this section are shown in Table 11.

Table 11

South African Survey of Student Engagement: Academic Contact with Peers

a)	How often have you worked with other students on projects during class?
b)	How often have you worked with classmates outside of class to prepare class assignments?
c)	How often have you put together ideas or concepts from different courses or subjects when completing assignments or during class discussions.
d)	How often have you tutored or taught other students (paid or voluntary)?
e)	How often have you discussed ideas from your readings or classes with others outside class (students, family members, co-workers, etc.)?

Note. Adapted from “Enhancing success in South Africa’s higher education: Measuring student engagement”, by J. F. Strydom, M. Mentz and G. D. Kuh. 2010, *Acta Academia*, 42, p. 49. Copyright 2010 by Council on Higher Education. Adapted with permission.

As discussed in the section above, the alpha coefficients for the items of the complete survey were calculated as between 0.75 and 0.85 for South African students (Strydom et al., 2010).

i. Participation in extracurricular activities. Participation in extracurricular activities was quantified by making use of an item of the *SASSE* (Strydom & Mentz, 2010). Participants were required to provide an estimation of the number of hours per week they spent on extracurricular and co-curricular activities (e.g., organisations, campus publications, involvement in SRC projects, residence duties, inter-residence sport, community services, etc.). They could choose between the following options: None (scored 1); 1-5 hours (scored 2); 6-10 hours (scored 3); 11-15 hours (scored 4); 16-20 hours (scored 5); 21-25 hours (scored 6); 26-30 hours (scored 7); or More than 30 hours (scored 8). The lowest score was 1 and the highest score was 8, with higher scores indicating more time spent participating in extracurricular activities.

j. Non-academic contact with staff. As in the case of academic contact between students and staff, sections of the *Professor-Student Rapport Scale* (Wilson et al., 2010) were utilised to measure social interaction between students and staff. This scale gives an indication of students’ perceptions of the interactions and relationships with their lecturers. As discussed in the section above, this scale consists of 25 questions, of which 11 questions were used to indicate the non-academic interactions between students and staff. This scale requires

answers on a five-point scale, ranging from strongly disagree (1), disagree (2), neutral (3), agree (4), to strongly agree (5). The higher the score is, the better the relationships and interactions between students and staff are. The scale was introduced as follows in the questionnaire: “Listed below are a number of statements concerning your views about your lecturers. Rate each item as it pertains to YOU personally. Base your ratings on how you feel MOST OF THE TIME.” Items that were utilised to measure non-academic contact with staff are shown in Table 12. Questions marked with an * were scored in reverse.

Table 12

Professor-Student Rapport Scale (Non-Academic Contact)

a)	Most of my lecturers are inconsiderate.*
b)	Most of my lecturers are understanding.
c)	Most of my lecturers are thoughtful.
d)	Most of my lecturers are disrespectful.*
e)	I mostly respect my lecturers.
f)	Most of my lecturers are not friendly.*
g)	My lecturers are compassionate.
h)	My lecturers care about students.
i)	My lecturers want to make a difference.
j)	My lecturers are reliable.
k)	My lecturers are unfair.*

Note. Adapted from “Professor-student rapport scale predicts student outcomes”, by J. H. Wilson, R. Ryan and J. L. Pugh, 2010, *Teaching of Psychology*, 37, p. 249. Copyright 2010 by PsychTESTS. Adapted with permission.

Wilson et al. (2010) indicated a high Cronbach alpha score (0.96), while Ryan et al. (2011) tested the scale for internal consistency and test-retest reliability and reported an alpha coefficient of 0.89 and a test-retest reliability of $r = 0.72$ for American university students.

In this study, during the capturing of the *Professor-Student Rapport Scale* (non-academic contact) in the electronic survey, one of the items was omitted by mistake. Therefore, the final *Professor-Student Rapport Scale* (non-academic contact items) in this study contained only 10 questions (with a lowest possible score of 10 and a highest possible score of 50). This should be kept in mind during the interpretation of the results.

k. Non-academic contact with peers. Non-academic contact with peers was quantified by making use of an item of the *SASSE* (Strydom & Mentz, 2010). Participants were required to provide an estimation of the number of hours per week they spent on social activities (e.g., relaxing and socialising, watching TV, partying, etc.). They were given the following time-frame options: None (scored 1); 1-5 hours (scored 2); 6-10 hours (scored 3);

Factors and experiences related to academic success

11-15 hours (scored 4); 16-20 hours (scored 5); 21-25 hours (scored 6); 26-30 hours (scored 7); or More than 30 hours (scored 8). The lowest possible score was 1 and the highest score was 8, with higher scores indicating more time spent on non-academic activities with peers.

l. Living arrangements. To quantify students' living arrangements, participants had to choose one of two options: either living off campus or living on campus (in a residence).

m. Financial responsibilities. Financial stress was measured by making use of the *College Stress Inventory – Modified* (Solberg, Hale, Villarreal, & Kavanagh, 1993). This inventory consists of three subscales, namely an academic subscale, social subscale, and financial subscale. For the purpose of this study, only the financial subscale was utilised. This subscale consists of five questions that are answered by using a five-point scale: never (1), seldom (2), occasionally (3), frequently (4), and always (5). The higher the participant's score is, the higher the level of financial stress related to their studies is. The lowest possible score participants could obtain was 5, whereas the highest score was 25. The scale was introduced as follows in the test battery: "*Listed below are a number of statements regarding the impact of financial responsibilities on your academic performance. Rate each item as it pertains to YOU personally. Base your ratings on how you feel MOST OF THE TIME.*" The items of the financial subscale of this questionnaire are indicated by Table 13. There were no reverse score items for this scale.

Table 13

Financial subscale of the College Stress Inventory – Modified

-
- a) I will have difficulty with paying student fees next semester.

 - b) I have financial difficulties due to owing money.

 - c) I have difficulty to pay for my accommodation each month.

 - d) I have difficulty paying for food every month.

 - e) I stress about finances due to my family experiencing money problems.

Note. Adapted From "Development of the College Stress Inventory for use with Hispanic populations. A confirmatory analytic approach", by V. S. Solberg, J. B. Hale, P. Villarreal, and J. Kavanagh, 1993, *Hispanic Journal of Behavioural Sciences*, 15, p. 494. Copyright 1993 by SAGE publications. Adapted with permission.

The internal consistency of the total scale has been reported to be 0.89 among Hispanic students (Solberg et al., 1993). McNulty (2014) indicated that the items of the total scale reflected a Cronbach alpha coefficient of 0.91, while the items of the financial subscale had an alpha coefficient of 0.91 for undergraduate students.

n. Family responsibilities. Students' family responsibilities were measured using sections of the *Work-Family-School Conflict Scale* (Olson, 2014). The total scale consists of 12 questions, of which six questions form part of the family responsibility subscale. The remaining six questions were utilised to measure occupational responsibility and are discussed in the next section. The seven-point scale ranges from strongly disagree to strongly agree and includes the following: strongly disagree (1), mildly disagree (2), disagree (3), neutral (4), agree (5), mildly agree (6), and strongly agree (7). The lowest possible score was 6, and the highest possible score was 42. The higher participants' scores were, the higher the stress levels related to family responsibilities were. The following statement was utilised to introduce the scale: "*Listed below are a number of statements regarding the impact of work and family responsibilities on your academic performance. Rate each item as it pertains to YOU personally. Base your ratings on how you feel MOST OF THE TIME.*" In Table 14, all the items used to measure family responsibility are shown.

Table 14

Family Responsibility Items of the Work-Family-School Conflict Scale

a)	Due to all the pressures at home, sometimes when I arrive at class, I am too stressed to do the things I have to do.
b)	Due to stress at home, I am often preoccupied with family matters at university.
c)	Because I am often stressed about family responsibilities, I struggle to concentrate on my academic work.
d)	The time I must devote to my family keeps me from participating in activities and tasks at university.
e)	The time I spend on family responsibilities often interferes with my academic responsibilities.
f)	The amount of time my family takes up makes it difficult for me to fulfil my academic responsibilities.

Note. Adapted from "Development of an initial validation of a measure of work, family and school conflict", by K. Olson, 2014, *Journal of Occupational Health Psychology*, 19, p. 50. Copyright 2014 by PsychTESTS. Adapted with permission.

Olson (2014) indicated that the Cronbach alpha coefficients ranged from 0.86 to 0.95 for American students.

o. Employment responsibilities. Six questions of the *Work-Family-School Conflict Scale* (Olson, 2014) were used to measure occupational aspects. The seven-point scale ranges from strongly disagree to strongly agree and include the following: strongly disagree (1), mildly disagree (2), disagree (3), neutral (4), agree (5), mildly agree (6), and strongly agree (7). The lowest possible score was 6, and the highest possible score was 42. The higher the scores on the scale were, the higher the levels of stress related to employment responsibilities

were. The following statement was utilised to introduce the scale: “*Listed below are a number of statements regarding the impact of work and family responsibilities on your academic performance. Rate each item as it pertains to YOU personally. Base your ratings on how you feel MOST OF THE TIME.*” All the items utilised to measure employment responsibilities are shown in Table 15.

Table 15

Employment Responsibility Items of the Work-Family-School Conflict Scale

a)	I am often so emotionally drained when I am finished with work that it prevents me from doing university activities.
b)	Due to all the pressures at work, sometimes, when I attend class, I am too stressed to do my academic work.
c)	Because I am often stressed about work responsibilities, it prevents me from concentrating on my academic work at university.
d)	The time I spend on work often interferes with my academic responsibilities at university.
e)	My job interferes with my responsibilities at university, such as getting to class and finishing assignments on time.
f)	The amount of time my job takes, makes it difficult for me to fulfil my academic responsibilities at university.

Note. Adapted from “Development of an initial validation of a measure of work, family and school conflict”, by K. Olson, 2014, *Journal of Occupational Health Psychology*, 19, p. 50. Copyright 2014 by PsychTESTS. Adapted with permission.

As indicated above, the alpha coefficient was reported to be between 0.86 and 0.95 for American students (Olson, 2014).

4.4.2 Qualitative data-collection procedures. In this research study, the qualitative data were gathered using focus groups. Onwuegbuzie, Dickinson, Leech, and Zoran (2009) stated that focus group research enables the researcher to collect qualitative data by making use of a discussion among a small group of people focussed around a specific topic or issue. According to Gill, Stewart, Treasure, and Chadwick (2008), focus groups are used to generate information on the research topic and examine the meanings that lie behind the views and perceptions of participants. Focus groups are valuable in producing a deep understanding of participants’ attitudes and experiences (Berg, 2009). Moreover, focus groups are less threatening to many research participants due to the social interaction. However, Stokes and Bergin (2006) warned that some participants may also feel inhibited by the group situation and may publicly agree with the views of other group members while they disagree privately. Another advantage of making use of focus groups is that the researcher is able to collect data from several individuals simultaneously. This contributes to the fast, effective, and economical nature of focus groups (Duggleby, 2005; Krueger, 2000; Krueger & Casey,

2000; Onwuegbuzie et al., 2009). Kritzinger (1995), and Webb and Kevern (2001) indicated that the key attribute of focus groups is the active encouragement of group interaction among participants. This could lead to an increase in participants' sense of cohesiveness and belonging and enhance the expression of individuals' views and opinions. Focus groups centre on the use of interaction among participants as a tool of accessing data that would not emerge if other methods were used (Berg, 2009; Krueger, 2000). The face validity (i.e., whether or not the focus group questions measure what they are supposed to measure) of focus groups is increased because what participants say can be confirmed, reinforced or contradicted in the group discussion. Another benefit of making use of focus groups is that it does not discriminate against participants who cannot read or write, or participants who find it difficult to articulate their thoughts in writing (Onwuegbuzie et al., 2009; Webb & Kevern, 2001).

Johnson and Christensen (2004), and Onwuegbuzie et al. (2009) indicated that a well-designed focus group consists of between 6 and 12 participants and lasts at least an hour. The reason for the size range described above is that the focus group should include an adequate number of participants to yield diversity in information provided, but should not include so many participants that it creates an uncomfortable environment to share views. However, Krueger (1994) approved of the use of very small focus groups, termed mini focus groups. These groups consist of three to four participants that have specialised knowledge and/or experiences to share in the group.

The number of meetings that a focus group has can vary from a single meeting to multiple meetings (Sandelowski, 2008). Three to six different focus groups, with each group meeting once or more, have been shown to be adequate to reach data saturation (Onwuegbuzie et al., 2009). However, it is important to note that the number of meetings required depends upon the complexity of the subject of the research. Therefore, research topics that are more complex could require more focus group meetings before a point of saturation (a point when the discussion is only replicating existing data and no new information becomes available) is reached.

It has been indicated that it is ideal for the focus group to have a facilitation team that comprises a facilitator and an assistant facilitator. The facilitator is responsible for facilitating the discussion, prompting participants to give their opinions, requesting excessively talkative members to give others an opportunity to speak, taking notes that will inform potential

emergent questions to be asked, and presenting the group with questions. Additionally, the assistant facilitator is responsible to observe and record the session, to take notes, create an environment conducive to group discussion, and to focus on non-verbal information (Krueger & Casey, 2000; Thomas & Quinlan, 2014).

Focus group sessions can vary, depending on the amount of structure provided by the questions posed during the session. Semi-structured discussions direct the dialogue by making use of predetermined questions, but also offer participants the opportunity to explore aspects that they deem important. Krueger and Casey (2000) pointed out that semi-structured focus groups are about talking to individuals in ways that are self-conscious, orderly, and partially structured. The use of an interview schedule allows the same information to be collected from all groups because it enables the facilitator to list the themes that will be explored during every focus group discussion.

In the present study, six focus group discussions were held, with each group meeting once. Each focus group consisted of between 3 and 12 participants and lasted between 50 and 60 minutes. Most of the focus groups discussions were facilitated by both a facilitator and assistant facilitator, but in some groups only one facilitator led the group discussion. All discussions that took place during the focus group discussions were recorded and transcribed verbatim for further analysis.

The focus group discussions began with a general discussion regarding the aim and nature of the study. Each participant received an information document (see Appendix B), and the facilitator discussed ethical considerations with participants. Participants were given an opportunity to ask questions or clarify concepts and were informed that the discussion would be recorded.

After the general discussion, the facilitator began to investigate participants' views regarding academic success. At first, general questions were asked, and participants were encouraged to elaborate on their views and opinions. In cases where more information were needed, more specific questions were asked to stimulate discussion among participants. Some of the areas that were explored included the participants' views on what academic success is and what they viewed as the most important contributing factors to academic success. When more information was needed, prompting and follow-up questions about academic success,

for example regarding gender, age, part-time working, family responsibilities, support from peers and staff, and commitment to academic goals and the HE institution, were asked.

4.5 Data Analysis

After collecting the data, a process of data-analysis was employed to make sense of the data that had been gathered by considering patterns that could shed light on the research questions (Bless et al., 2006). Since a mixed-methods design was utilised, both the quantitative and qualitative procedures of analyses are discussed in detail below.

4.5.1 Quantitative analysis. During the quantitative section for the study, several procedures were followed. Firstly, the reliability of each of the questionnaires that were utilised in the test battery was considered. Secondly, the study made use of descriptive statistics to investigate certain trends in the data. Thirdly, multivariate analyses of variance (MANOVAs) were completed to conclude whether significant differences existed between the various subgroups in the sample with regard to academic success and post-enrolment factors. The last analysis that formed part of the quantitative section of the study was regression analyses to investigate the relationships between academic success (the dependent variable) and a number of independent variables.

The first aspect that was considered in the statistical analyses was the reliability of the questionnaires and scales that were utilised during the quantitative section of the study. According to Pallant (2013), two commonly used indicators of reliability are the test-retest reliability and the internal consistency of a scale or questionnaire. While the test-retest reliability of a scale is determined by administering it to the same group of individuals on different occasions and calculating the correlation between the two scores, the internal consistency of a scale refers to the degree to which the individual items of the scale are measuring the same underlying construct. Cronbach's alpha coefficient is one of the most commonly utilised indicators of internal consistency, especially when working with Likert-scale questionnaires. Preferably, Cronbach's alpha coefficients of the items of a scale should be above 0.7 (DeVellis, 2003; Foxcroft & Roodt, 2009). However, Cronbach's alpha values are sensitive to the number of items in a scale, and it is common to find lower Cronbach alpha values in scales with fewer than ten items, scales where reverse items are used, and in the case of heterogeneous constructs (Pallant, 2013). Furthermore, reliability scores can be affected by other factors such as responding within a second, or a third language in which respondents are

not fluent, or in situations where respondents are uncooperative and respond randomly (Allik, Laidra, Realo, & Pullmann, 2004). Moreover, Schmitt (1996) stated that measures with low alpha scores can still be valuable if the measure has other important properties such as meaningful content coverage of a certain domain. Therefore, lower Cronbach alpha coefficient scores have been used in literature (Panayides, 2013). During this study, the Cronbach alpha coefficients for the items of all the scales used were determined before further analyses commenced.

This research study made use of descriptive statistics for both the categorical and continuous variables measured in the study. Pallant (2013) states that, by making use of frequencies, the researcher will obtain information regarding the number of individuals who gave each response, while descriptives will give an indication of summary statistics such as mean, median, and standard deviation. In the case of categorical variables (such as gender and age), frequency distributions were utilised, while descriptive statistics (including means and standard deviations) were used in the case of continuous variables (such as academic success and academic self-concept).

In this study, multivariate analyses of variance (MANOVAs) were used to determine whether significant differences existed between various groups on a range of different variables. Pallant (2013) stated that MANOVAs are used when groups are compared to determine whether significant differences exist with regard to more than one variable. In the case of significant differences indicated by the MANOVA, a one-way analysis of variance (ANOVA) was utilised to determine which dependent variables showed significant differences. For the purposes of this study, both the 1% and the 5% levels of statistical significance were considered. Lastly, the effect size was calculated to determine the practical significance of the findings. According to Steyn (1999), a value of 0.2 indicates a small effect, 0.25 indicates a medium effect, and 0.4 indicates a large effect. Sullivan and Feinn (2012) classified 0.2 as a small effect size, 0.5 as medium, and 0.8 as large.

This study made use of standard multiple regression analyses (Montgomery et al., 2001) to determine the amount of variance in academic success that can be explained by a number of variables. Regression analyses allow for the exploration of relationships between one continuous dependent variable and a number of independent variables. Furthermore, multiple regression is based on correlation and makes it possible to explore the interrelationships within a set of variables. One of the advantages of using a correlation is that

it assists the researcher in determining the strength and direction of the relationships between variables (Johnson & Christensen, 2012; Pallant, 2013; Tabachnick & Fidell, 2001). Multiple regression analyses allow for a more complicated investigation of interrelationships within a certain set of variables. Pallant (2013) was of the opinion that this fact makes multiple regression ideal for the exploration of more complex, real-life research questions. When considering the complex nature of academic success and the multiple contributors to academic success, as described in previous chapters, multiple regression allows for the investigation of such a complex construct. Similar to a MANOVA, both the 1% and 5% levels of statistical significance were considered, and the practical significance of the results were investigated by determining the effect sizes. Similar to the description above, 0.2 indicates a small effect size, 0.25 to 0.5 signifies a medium effect size, and 0.5 to 0.8 indicates a large effect size (Steyn, 1999; Sullivan & Feinn, 2012).

4.5.2 Qualitative analysis. In this study, thematic analysis (Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006) was employed to identify important themes regarding students' experiences of academic success and the factors associated with it. According to Babbie and Mouton (2006), thematic analysis is regarded as one of the foundational methods of analysis in qualitative research. It allows the researcher to work through vast amounts of gathered data. Moreover, thematic analysis is a form of recognising patterns in the data, where the emerging patterns become categories for further analysis (Fereday & Muir-Cochrane, 2006; Lawal, 2009).

Usually, several steps are followed during the qualitative analysis (Attride-Stirling, 2001; Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006). The first step highlighted by researchers is the process of becoming familiar with the data. Braun and Clarke (2006) stated that, although it is time consuming, transcription should be considered as a key phase of the data-analysis process and is recognised as an interpretive act. Furthermore, if the data have been transcribed by someone else, it is of utmost importance that researchers familiarise themselves with the data (Fereday & Muir-Cochrane, 2006). During this study, the researcher was involved in conducting the focus groups (and thus already possessed some basic knowledge of the data), but the data were transcribed by a research assistant. During this first phase of analysis, the researcher began to immerse herself in the material by reading the transcribed text actively and repeatedly. Furthermore, the researcher began to make notes and identify possible themes for coding.

According to Crabtree and Miller (1999) and Fereday and Muir-Cochrane (2006), the next step focuses on generating initial codes from the data. Codes refer to the most basic element of the raw data regarding the phenomenon that is being examined that can be assessed meaningfully (Braun & Clarke, 2006). Codes can be achieved by dissecting the text into controllable and significant text segments, with the use of a coding framework (Attride-Stirling, 2001). During this phase, the researcher made use of both data-driven and theory-driven approaches; therefore, research questions were kept in mind, but the researcher was also open to new ideas emerging from the data. Coding was conducted manually, and the researcher made notes and used different coloured highlighters to identify and indicate the different segments of data.

The third step of the process involves sorting the different codes into broader themes and collating all the relevant coded data extracts in the identified themes. During this phase, the researcher refocuses the analysis on the broader level of themes, rather than codes, and begins the process of analysing the codes while considering how different codes can combine together to form an overarching theme (Attride-Stirling, 2001; Boyatzis, 1998; Braun & Clarke, 2006). In the study, a mind map was utilised to aid the researcher in considering relationships between codes, themes, and different levels of themes. At the end of the phase, the researcher began to form an idea of the significance of individual themes. However, no data were abandoned at this stage.

Crabtree and Miller (1999) and Fereday and Muir-Cochrane (2006) stated that the next stage focuses on refinement of the broader themes that were identified in the previous stage. During this stage, it is important to ensure that data within themes join meaningfully, while clear and identifiable distinctions between themes exist (Braun & Clarke, 2006). During this step, the coded data were reviewed first to decide whether collated data for each theme appeared to form a coherent pattern. Some themes had to be reworked in order for data sets to fit with the theme. Next, the validity of the individual themes in relation to the data set was considered. Moreover, the researcher also evaluated whether the thematic map accurately reflected the meanings evident in the data set as a whole.

The fifth step involves defining and refining the themes identified in previous steps. This is achieved by reconsidering each theme and organising themes into a coherent and consistent account with an accompanying narrative. It is important that the narrative is not just a paraphrasing of the data extracts but also an identification of what is of interest about each

theme and why. Lastly, it is important to consider how each theme fits into the broader overall theme of the research study (Attride-Stirling, 2001; Braun & Clarke, 2006; Crabtree & Miller, 1999). In this step, the researcher wrote an analysis for each individual theme and identified how the “story” of each theme fit into the broader, overall “story” that related to the research questions. Themes needed to be examined to identify any subthemes. Furthermore, the researcher began to identify concise names for each theme that would give readers an idea of the topic of each of these themes.

The sixth and last stage is focussed on the final analysis and documentation of the information. The documentation of the thematic analysis should convince the reader of the merit and validity of the analysis and should provide a concise, logical, and non-repetitive account of the data (Boyatzis, 1998; Braun & Clarke, 2006; Fereday & Muir-Cochrane, 2006). During this stage, the researcher aimed to provide a succinct and coherent account that offered enough evidence of the themes in the data. This analytic narrative forms part of the next chapter of this research study.

4.6 Trustworthiness and Rigour of the Study

Babbie and Mouton (2006) state that trustworthiness can be achieved when research is fair and balanced and when the researcher acknowledges the diversity in participants’ interests, perspectives, and realities. In quantitative research, the quality of research is ensured by considering reliability, validity (internal and external), and objectivity (Golafshani, 2003; Winter, 2000). Furthermore, Guba (1981) and Onwuegbuzie and Johnson (2006) proposed four criteria that should be considered to achieve trustworthiness in qualitative studies, namely credibility, transferability, dependability, and confirmability, which are discussed next.

The first aspect to consider is the internal validity and credibility of the research. According to Onwuegbuzie and Johnson (2006), the term *internal validity* refers to how confidently it can be concluded that the change in the dependent variable was caused solely by the independent variables and not possible extraneous variables. *Credibility* refers to the fact that the research should explore what it actually intended to explore and relates to the question, “How congruent is the research findings with reality?” (Shenton, 2004). During the quantitative section of this study, the internal validity was enhanced by attempting to align data sources with the research questions and by recording the data accurately. Moreover,

during the qualitative section of the study, credibility was achieved by aiming to give an accurate account of respondents' realities, perceptions, and experiences. This was guaranteed by continuing with focus groups until a point of saturation had been achieved, by making use of a voice recorder to obtain accurate accounts of participants' views, and by using direct quotations of participants' perceptions and views to substantiate the findings and conclusions that were reached. Owing to the mixed-methods nature of the study, it was possible to increase the internal validity and credibility by making use of triangulation; data were collected by making use of a test battery and by means of focus group discussions.

The second aspect to consider is the *external validity* or *transferability* of the study. In quantitative terms, the external validity of a study indicates the extent to which the results can be generalised to other individuals or settings (Onwuegbuzie & Johnson, 2006). In terms of the qualitative study, transferability refers to the extent to which the findings of one study can be applied to other situations (Shenton, 2004). Guba (1981), Firestone (1993), and Shenton (2004) posit that it is the responsibility of the researcher to ensure that sufficient contextual information regarding the participants forming part of the study is provided to ensure the possibility of transferability. In the quantitative section of the study, students of the Faculty of the Humanities of all ages, languages, and both genders were included in the sample to achieve higher levels of external validity (but the use of convenience rather than random sampling could limit the external validity of the study). During the qualitative section of the study, transferability was improved by aiming to give a thick description regarding the research participants, including aspects such as the number of participants involved in focus groups and the characteristics of these participants. Because of the mixed-methods design, the results of the quantitative and qualitative sections of the study could complement each other in ensuring high levels of external validity and transferability.

Thirdly, the *reliability* and *dependability* of the study were important aspects to consider. The quantitative notion of reliability refers to achieving similar results if the study would be repeated with the same individuals and under the same conditions (Onwuegbuzie & Johnson, 2006). Dependability (qualitative research) can be achieved if the research study is repeated in the same context, with similar methods and participants, and similar results are obtained (Denzin & Lincoln, 2005). According to Shenton (2004), a detailed description of the research design and its implementation should be given, the operational details of gathering data should be explained, and a reflective appraisal of the project should be provided to increase dependability. To achieve reliability during the quantitative section of the

study, the processes and phases of the study were explained explicitly, and the researcher aimed to elaborate on aspects such as the rationale and design of the study and the psychometric properties of the measures that were used in the study. Furthermore, the researcher aimed to provide the reader with information regarding the qualitative research design, its implementation, and other operative details in order to achieve dependability in the qualitative section of the current study. Owing to the mixed-methods design of the study, these descriptions could be corroborated to enhance the probability to achieve similar results in both sections if the study were repeated.

Lastly, the *objectivity* and *confirmability* of the study were considered. In quantitative terms, objectivity refers to research that is precise and unbiased by the researcher's own beliefs and/or biases (Onwuegbuzie & Johnson, 2006), whilst the confirmability of a qualitative study refers to the objectivity of the research findings. To achieve confirmability, steps must be taken to ensure that the research findings are the result of the perspectives and experiences of the research participants, rather than the preferences of the researcher (Shenton, 2004). In terms of the quantitative section of the study, the researcher aimed to achieve objectivity by administering strict control when the data were analysed and interpreted and by maintaining high levels of awareness of any personal biases that might have an effect on the process. In the qualitative section of the current study, confirmability was improved by recording the focus group discussions and transcribing participants' direct words. It is assumed that the results are a product of the participants' views, rather than the researcher's biases, which is an important consideration, according to Babbie and Mouton (2006). However, it should be borne in mind that the researcher approached the focus group discussions with the pertinent literature in the background, which could have caused bias in the questions asked.

Tracy (2010) stated that self-reflexivity is another practice that qualitative researchers can utilise to improve the trustworthiness of a study. Self-reflexivity encourages researchers to become more self-aware by focusing on their strengths, weaknesses, biases, motivations, and their own subjective feelings regarding the research process and participants. In this study, the researcher noted her reactions and any biases to participants' opinions and statements by making use of a reflective diary (see Appendix C for an excerpt of the reflective diary).

4.7 Ethical Considerations

Basit (2013) stated that the first important step in conducting ethical research is to obtain approval from the relevant regulatory bodies. At the beginning of this study, authorisation and ethical clearance was obtained from the Dean of Students, the Department of Psychology, and the Research Ethics committee of the Faculty of the Humanities at the UFS (see Appendix D).

An important ethical aspect to consider is that participation in research is of a voluntary nature (Gravetter & Forzano, 2009; Social Research Association (SRA) (2003). Furthermore, according to the SRA (2003), obtaining informed consent from participants is a very important ethical consideration. The importance of informed consent is echoed by several other researchers (Fisher, 2004; Gravetter & Forzano, 2009; Silverman, 2013). During the quantitative section of the study, an e-mail describing the nature of the study and the questionnaires that had to be completed was sent to all students in the Faculty of the Humanities. The e-mail described the nature and aim of the study and indicated what would be expected of all participants. Students were informed that by completing the questionnaires, they gave permission that the researcher access their academic records, Grade 12 results (AP scores), and NBT results. To achieve informed consent during the qualitative data-gathering process, an information document was provided to all participants, and this document was discussed before commencing with the focus group discussions. The document informed participants of the nature of the research and what their participation would entail. Students were informed that the discussions would be recorded to enable the researcher to transcribe it at a later stage. Similar to the quantitative section, students were notified of their right to withdraw from the study at any stage. Moreover, students were encouraged to clarify any uncertainties on their part regarding the research study.

Maintaining anonymity and confidentiality with regard to participants' information is another important ethical consideration that is highlighted by several researchers (Pring, 2004; Silverman, 2013; SRA, 2003). In terms of the quantitative section of the study, students were informed of their right to anonymity in the e-mail that they received, and their information was treated as confidential. Although participants were not required to provide their names for the purposes of the study, it was required of participants to disclose their student numbers. Obtaining student numbers was necessary to enable the researcher to access information from Student Academic Services, such as participants' Grade 12 marks and academic results for

core modules. Moreover, confidentiality was maintained in handling all documentation, and no identifying data were included in the thesis. Completed questionnaires were stored securely to ensure a high level of confidentiality. During the qualitative section, anonymity in group settings presented some challenges since the possibility exists that participants could know one another, recognise one another or disclose information that had been discussed during the focus group (Litosseliti, 2007). In keeping with suggestions provided by Allan (2008), participants were requested to keep the information that was discussed during the focus group discussions confidential. Moreover, confidentiality was maintained in handling all focus group discussions, and no identifying data were included in the transcripts. Similar to the quantitative section of the study, transcripts and consent forms that contained any personal information were stored securely.

Gravetter and Forzano (2009) and the SRA (2003) pointed out that the researcher should protect the interests of the participants by minimising any harmful effects that may be a consequence of participation in the study. During both the quantitative and qualitative sections of the study, the researcher aimed to minimise any harmful effects on participants by firstly by describing in detail what participation in the study would entail, and secondly, by pointing out that participation was voluntary. Furthermore, students were made aware of student counselling and development services that were available to them throughout the duration of the study. They could utilise these services if the need arose for support during the process or when participants became aware of any academic challenges that came to the fore due to participation in the study. Finally, Webster, Lewis, and Brown (2013) highlighted respect for focus group participants as an important consideration. This was achieved by allowing participants the right to not answer a question, allowing participants unpressured time to think about their answers, avoiding any actions that might make participants feel judged or pressured, and asking questions that were clear and as uncomplicated as possible.

Gravetter and Forzano (2009), and Silverman (2013) warned that by offering an incentive to participate in research, participants could be tempted to participate against their initial judgement. However, Fisher (2004) indicated that researchers are allowed to make use of compensation for participants, but that steps should be taken to ensure that the compensation is not excessive and does not coerce participation. She stated that compensation is ethical when participants are informed of the nature of the research, and the personal and time commitments that will be required of participants. During this research study, all participants were informed of the nature of the study and of what would be expected of them.

Furthermore, although the researcher made use of compensation in both the quantitative and qualitative sections of the study, care was taken not to make use of excessive prizes and/or rewards. All participants (in both the quantitative and qualitative sections of the study), were compensated for their participation by being entered into a lucky draw where they could win one of two memory sticks or a book voucher. During the qualitative section, students who participated in the focus group discussions also received a small hamper containing a snack and beverage.

4.8 Chapter Summary

In this chapter, the rationale, aim, and research questions of the current research study were presented. Furthermore, the specific research design and approach were examined, and the reasons for utilising the chosen methods were explored. Next, the research participants that formed part of the sample, as well as the specific sampling procedures that were used, were discussed. The different quantitative and qualitative procedures and instruments that were used during the process of data collection were explained. Thereafter, the methods of analysis of the data were presented. Lastly, issues of trustworthiness were discussed and the ethical considerations pertaining to this specific study were pointed out.

Chapter 5: Results

In this chapter, the results of this study are presented. In the quantitative section of this chapter, the descriptive and inferential statistics are provided. In terms of the qualitative results, participants' experiences of academic success and the factors they associate with academic success are examined. For both the quantitative and qualitative sections, a summary of the main results is presented.

5.1 Quantitative Results

In this section, the reliability of the various scales that were used in this study is discussed first. Then, certain trends in the data are described. The last subsections (5.1.3 and 5.1.4) are devoted to the results pertaining to the inferential statistics completed to answer the research questions.

5.1.1 Reliability of the various scales used in this study. The reliability of the items of each of the scales that were utilised in the study was determined by means of Cronbach alpha coefficients. This is presented in Table 16.

Table 16

Cronbach's α -Coefficients for the Individual Scales used in the Study

Name of scale	Number of items	Cronbach's α
Goal Commitment Scale (to measure initial educational goals)	9	0.773
University Commitment Scale (to measure initial commitment to the HE institution)	7	0.909
Items of the South African Survey of Student Engagement (SASSE) (to measure physical energy devoted to HE activities)	6	0.686
School Achievement Motivation Rating Scale (to measure psychological energy devoted to HE activities)	12	0.590
Academic Self-Concept Scale (ASCS) (to measure academic self-concept)	39	0.921
Subscale of the Professor-Student Rapport Scale (to measure academic contact with staff)	14	0.889
Items of the South African Survey of Student Engagement (SASSE) (to measure academic contact with peers)	5	0.564
Subscale of the Professor-Student Rapport Scale (to measure non-academic contact with staff)	10	0.883
Subscale of the College Stress Inventory – Modified (to measure financial responsibilities)	5	0.899
Subscale of the Work-Family-School Conflict Scale (to measure family responsibilities)	6	0.948
Subscale of the Work-Family-School Conflict Scale (to measure employment responsibilities)	6	0.895

According to Foxcroft and Roodt (2009), questionnaires used in group settings should have a reliability of 0.7 or higher. Moreover, Huysamen (2001) indicated that a Cronbach α coefficient of 0.6 can be regarded as sufficient. According to these guidelines, it is apparent that most of the individual scales had Cronbach alpha scores of above 0.60, indicating acceptable reliability levels. However, the Cronbach alpha scores for the items of the *School Achievement Motivation Rating Scale* and the items on the *South African Survey of Student Engagement (SASSE)* were somewhat lower at 0.590 and 0.564 respectively. This is discussed later in the section dealing with limitations of the study.

5.1.2 Descriptive statistics. In Chapter 4, the biographic characteristics of the sample for the quantitative section of the study were already summarised in terms of age, gender, ethnic and racial representation, and the participants' year of study. In the following section, additional information regarding the manifestation of the various variables in this specific sample is provided. The descriptive statistics are grouped according to the pre- and post-enrolment factors relevant to this study.

Since race is an important consideration in the inferential statistics to follow, information regarding the two race groups (designated and white groups) is included in addition to the statistics for the total sample. Thus, information on each construct is indicated for the designated group (n = 180), white group (n = 44), and the total sample (n = 229). It is important to note that five participants' racial affiliation was not available, resulting in the fact that the totals of the two groups (n = 180 and n = 44) do not add up to the total sample size of 229.

Before commencing with the pre- and post-enrolment factors, descriptive statistics regarding the participants' academic success are provided in Table 17.

Table 17

Descriptive Statistics regarding the Dependent Variable Academic Success

Construct	N	Min	Max	Mean	SD
Academic average: Designated group	180	14.75	83.75	59.151	10.886
Academic average: White group	44	33.33	85.56	67.706	11.788
Academic average: Total sample	229	14.75	85.56	60.859	11.506

The mean academic average score for the total sample of participants was 60.859% (SD = 11.506). Although this is sufficient to pass the academic year when considering it dichotomously (pass or fail, with 50% as cut-off mark), it is a relatively low average when examining it from a continuous point of view.

5.1.2.1 Pre-enrolment factors. In the following section, information regarding participants' language proficiency, Grade 12 performance, high school attended, and parental levels of education is summarised.

Information regarding the participants' home language, their language of instruction, and how many of the participants received their tuition in their home language is provided in Table 18.

Table 18

Descriptive Statistics regarding Language Proficiency

		Designated group		White group		Total Sample	
		N	%	N	%	N	%
Home Language	English	10	5.6%	10	22.7%	20	8.7%
	Afrikaans	4	2.2%	34	77.3%	40	17.4%
	isiXhosa	29	16.1%	0	0%	29	12.6%
	isiZulu	28	15.6%	0	0%	30	13.0%
	isiNdebele	1	0.6%	0	0%	1	0.4%
	Northern Sotho	44	24.4%	0	0%	44	19.1%
	SeSotho	31	17.2%	0	0%	31	13.5%
	SeTswana	5	2.8%	0	0%	5	2.2%
	TsiVenda	4	2.2%	0	0%	4	1.7%
	SiSwati	24	13.3%	0	0%	24	10.4%
	Not answered	0	0%	0	0%	1	0.4%
	Total	180	100%	44	100%	229	100%
	Language of instruction	English	176	97.8%	21	47.7%	200
Afrikaans		4	2.2%	23	52.3%	28	12.2%
Not answered		0	0%	0	0%	1	0.4%
Total		180	100%	44	100%	229	100%
Tuition in home language	Yes	11	6.1%	33	75%	45	19.7%
	No	169	93.9%	11	25%	183	79.9%
	Not answered	0	0%	0	0%	1	0.4%
	Total	180	100%	44	100%	229	100%

Of the participants that formed part of the sample, 87.3% received their education in English, while 12.2% indicated Afrikaans as their language of instruction. However, only 8.8% of the participants in the sample indicated that their home language was English, and 17.4% indicated Afrikaans as their home language. The remaining 73.8% of participants had a home language other than Afrikaans or English (isiXhosa: 12.6%; isiZulu: 13%; isiNdebele: 0.4%; Northern Sotho: 19.1%; SeSotho: 13.5%; SeTswana: 2.2%; TsiVenda: 1.7%; SiSwati: 10.4%). Thus, the largest proportion of participants in the sample had a language of instruction different from their home language (79.9%), with only 19.7% of participants receiving tuition in their home language. Considered separately, only 6.1% of participants from the designated group, but 75% of participants from the white group, received tuition in their first language.

In addition to home language and language of instruction, the NBT scores of some of the participants (that were available from Student Academic Services) were calculated and are summarised in Table 19.

Table 19

Descriptive Statistics pertaining to NBT Scores

Construct	N	Min	Max	Mean	SD
NBT score: Designated group	63	30	71	50.63	9.309
NBT score: White group	27	43	88	64.15	12.532
NBT score: Total sample	93	30	88	54.83	12.254

The 93 participants' NBT scores ranged from a minimum of 30 to a maximum of 88, with an average of 54.83% (SD = 12.254). Considering the NBT guidelines, scores between 42% and 64% indicate intermediate performance and that participants need additional assistance. When considering the results by race group, it is evident that participants from the designated group experienced more intense challenges with regard to language proficiency.

Participants' Grade 12 performance (through the use of AP scores) are summarised in Table 20.

Table 20

Descriptive Statistics pertaining to Grade 12 Performance

Construct	N	Min	Max	Mean	SD
AP score: Designated group	177	13	37	25.0	4.469
AP score: White group	41	21	45	32.34	6.065
AP score: Total sample	223	13	45	26.52	5.602

From the table above, it is clear that AP scores range from 13 to 45 with an average of 26.52 (SD = 5.602). As stated in the previous chapter, students with an AP score of 28 and above are entered into the mainstream three-year curriculum, while students with an AP score below 28 are entered into the extended curriculum. Thus, the average AP score of participants is below the score required for entry into mainstream HE, indicating the need participants (especially participants from the designated group with a mean of 25) might have for additional support to succeed in HE.

The type of high school that the participants attended is summarised in Table 21.

Table 21

Descriptive Statistics regarding Type of High School Attended

		Designated group		White group		Total sample	
		N	%	N	%	N	%
Type of high school attended	Non-fee-paying public school	49	27.2%	0	0%	49	21.4%
	Fee-paying public school	103	57.2%	37	84.1%	144	62.9%
	Private school	23	12.2%	3	6.8%	25	10.9%
	Not answered	6	3.3%	4	9.1%	11	4.8%
	Total	180	100%	44	100%	229	100%

In terms of schools that participants attended, the highest proportion of participants attended fee-paying public schools (62.9%), while 21.4% of participants attended non-fee-paying public schools. Only a small proportion of participants indicated that they attended a private high school (10.9%). Furthermore, only participants from the designated group (27.2%) indicated that they attended non-fee-paying public schools, while no participants from the white group attended non-fee-paying high schools.

Information with regard to who the participants' primary caregivers were, and the levels of education of primary caregivers, is given in Table 22.

Table 22

Descriptive Statistics regarding Parental Levels of Education

		Designated group		White group		Total sample	
		N	%	N	%	N	%
Primary caregiver	Father	33	18.3%	15	34.1%	49	21.4%
	Mother	119	66.1%	25	56.8%	145	63.3%
	Other	26	14.4%	3	6.8%	31	13.5%
	Not answered	2	1.1%	1	2.3%	4	1.7%
	Total	180	100%	44	100%	229	100%
Level of education of caregiver	No education	4	2.2%	0	0%	4	1.7%
	Primary level	10	5.6%	0	0%	10	4.4%
	Intermediate level	15	8.3%	0	0%	15	6.6%
	Senior level	20	11.1%	1	2.3%	21	9.2%
	Further education	48	26.7%	13	29.5%	63	27.5%
	Higher education	83	46.1%	30	68.2%	115	50.2%
	Not answered	0	0%	0	0%	1	0.4%
Total	180	100%	44	100%	229	100%	
Generational status	First-generation	97	53.9%	14	31.8%	113	49.3%
	Continuous-generation	83	46.1%	30	68.2%	115	50.2%
	Not answered	0	0%	0	0%	1	0.4%
	Total	180	100%	44	100%	229	100%

Most of the participants indicated their mothers as their primary caregiver (63.3%). Furthermore, most of the participants had a primary caregiver that had received further or higher education (27.5% and 50.2% respectively), while only 21.9% of the participants had primary caregivers with education levels below senior school level. However, participants from the designated group indicated parental education levels below senior education, while participants from the white group all indicated parental education levels at a senior level and above. When grouping the levels of education of the primary caregivers together, 113 (49.3%) of participants were the first-generation in their family to attend HE, while 115 (50.2%) of participants had a primary caregiver who had attended HE. Once again, more participants from the designated group (53.9%) indicated that they were first-generation students, while only 31.8% of the white participants had first-generation status.

5.1.2.2 Post-enrolment factors. In this section, descriptive statistics regarding the post-enrolment factors that formed part of the study are presented. These include students' initial educational goals and initial commitment to the HE institution, the physical and psychological energy that students devoted to HE activities, and students' academic self-concept. Furthermore, it includes academic integration factors (participation in academic activities, academic contact with staff, and academic contact with peers), social integration factors (participation in extracurricular activities, non-academic contact with staff, non-academic contact with peers, and living arrangements) and external factors (financial responsibilities, family responsibilities, and employment responsibilities).

Participants' scores regarding their commitment to their academic goals, commitment to the HE institution, the physical and psychological energy that they devoted to their academic careers, and academic self-concept are summarised in Table 23.

Table 23

Descriptive Statistics regarding Participants' Commitment to Goals and HE Institution, Physical and Psychological Energy Devoted to Academic Career, and Academic Self-Concept

Post-enrolment factor		N	Min	Max	Mean	SD
Goal commitment (Scale range: 9-36)	Designated group	180	15	36	28.16	4.368
	White group	44	15	36	29.77	4.734
	Total sample	229	15	36	28.52	4.467
University commitment (Scale range: 7-28)	Designated group	180	7	28	22.17	4.637
	White group	44	7	28	20.84	4.595
	Total sample	229	7	28	21.92	4.650
Physical energy devoted to HE activities (Scale range: 6-24)	Designated group	180	11	24	17.79	3.006
	White group	44	11	24	17.68	4.010
	Total sample	229	11	24	17.75	3.205
Psychological energy devoted to HE activities (Scale range: 12-60)	Designated group	180	16	42	28.83	5.473
	White group	44	20	42	29.20	5.712
	Total sample	229	16	42	28.89	5.451
Academic self-concept (Scale range: 40-160)	Designated group	180	78	150	110.70	14.224
	White group	44	89	145	116.25	14.978
	Total sample	229	78	150	111.88	14.378

When considering commitment to academic goals (with a possible range of 9 to 36), participants in the total sample scored a minimum of 15 and a maximum of 36. For this scale, the mean was 28.52 (SD = 4.467), higher than the scale midpoint of 22.5. No remarkable differences in mean scores could be seen for the two different race groups, with the designated group achieving a mean score of 28.16 (SD = 4.368) and the white group a mean of 29.77 (SD = 4.734).

The mean score for the entire sample of participants on the University Commitment Scale was 21.92 (SD = 4.650), which is also slightly higher than the scale midpoint of 17.5. Similar to students' commitment to their academic goals, commitment to HE also did not show significant differences according to the different race groups, with mean scores of 22.17 (SD = 4.637) for the designated group and 20.84 (SD = 4.595) for the white group.

The physical energy that participants devoted to their academic careers had a minimum score of 11 and a maximum score of 24 (with the possible range of the scale between 6 and 24). The mean of this scale for the total sample was 17.75 (SD = 3.205), with a tendency towards higher scores. The mean scores of both race groups had a tendency towards higher scores, with the designated group achieving a mean score of 17.79 (SD = 3.006) and the white group achieving a mean of 17.68 (SD = 4.010).

The psychological energy that participants devoted to their academic career had a minimum score of 16 and a maximum score of 42, indicating a wide range of scores, with a mean of 28.89 (SD = 5.451) for the entire sample. The designated group had a mean score of 28.83 (SD = 5.437), and the white group had a mean of 29.20 (SD = 5.712).

Lastly, on the Academic Self-Concept Scale, with a possible scale range of 40 to 160, the participants in the total sample of the study scored a minimum of 78 and a maximum of 150, with a mean of 111.88 (SD = 14.38). This indicates a wide range of scores with a tendency towards higher self-concept scores (considering a scale midpoint of 100). When considering race, mean scores of the designated race group and white group did not show much difference, although the white group achieved a slightly higher mean score of 116.25 (SD = 14.978) as opposed to the mean of 110.70 (SD = 14.224) of the designated group.

In Table 24, descriptive statistics pertaining to the participants' academic integration are summarised (including participation in academic activities, and academic contact with staff and peers).

Table 24

Descriptive Statistics regarding Participants' Academic Integration

Post-enrolment factor		N	Min	Max	Mean	SD
Participation in academic activities (Scale range: 3-16)	Designated group	180	3	16	7.91	3.266
	White group	44	4	15	7.68	2.916
	Total sample	229	3	16	7.85	3.164
Academic contact with staff (Scale range: 14-70)	Designated group	180	23	70	55.30	8.385
	White group	44	36	70	54.39	8.309
	Total sample	229	23	70	55.04	8.324
Academic contact with peers (Scale range: 5-20)	Designated group	180	7	20	13.46	2.747
	White group	44	6	19	12.93	2.774
	Total sample	229	6	20	13.34	2.759

From the table above, it can be seen that the minimum score obtained in terms of academic involvement was 3, and the maximum score was 16, which indicates a wide range of responses. The mean score on this scale for the entire sample was 7.85 (SD = 3.164). This indicates slightly lower scores on this scale and slightly lower levels of academic involvement and time spent on academic activities (the midpoint of the scale is 9.5). Similar results could be seen for both the designated group and white group. The designated group had a mean score of 7.91 (SD = 3.266) while the white group had a mean score of 7.68 (SD = 2.916).

With regard to academic contact with staff, with a possible scale range of 14 to 70, the participants in the entire sample of this study scored a minimum of 23 and a maximum of 70, with a mean of 55.04 (SD = 8.324). This indicates scores with a tendency towards higher levels of academic contact with staff (considering a scale midpoint of 42). The designated group had a mean score of 55.30 (SD = 8.385) and the white group a mean score of 54.39 (SD = 8.309); both groups had a tendency towards higher scores.

In terms of the academic contact between peers, the participants scored a minimum of 6 and a maximum of 20, indicative of a wide range of scores. The mean of this scale for the entire sample was 13.34 (SD = 2.759), while the mean for the designated group was 13.46 (SD = 2.747) and for the white group 12.93 (SD = 2.774).

In Table 25, descriptive statistics pertaining to the participants' social integration are summarised in terms of their participation in extracurricular activities, and non-academic contact with staff and peers. Table 26 provides information regarding participants' living arrangements.

Table 25

Descriptive statistics regarding participants' Social integration

Post-enrolment factor		N	Min	Max	Mean	SD
Participation in extracurricular activities (Scale range: 1-8)	Designated group	180	1	8	2.02	1.250
	White group	44	1	6	1.91	1.074
	Entire sample	229	1	8	2.03	1.242
Non-academic contact with staff (Scale range: 10-50)	Designated group	180	22	50	40.93	5.928
	White group	44	30	50	40.86	5.246
	Entire sample	229	22	50	40.94	5.740
Non-Academic contact with peers (Scale range: 1-8)	Designated group	180	1	8	2.81	1.298
	White group	44	1	8	3.66	1.725
	Entire sample	229	1	8	2.97	1.426

When considering participants' participation in extracurricular activities, the minimum score was 1 and the maximum score was 8, with a mean score of 2.03 (SD = 1.242) for the entire sample. Slightly lower scores are indicated, since the midpoint of this scale is 4.5. The designated group had a slightly higher mean (mean = 2.02, SD = 1.250) than the white group had (mean = 1.91, SD = 1.074).

In terms of the non-academic contact between students and staff, the minimum score was 22 and the maximum score was 50, with a mean of 40.94 (SD = 5.740) for the entire

sample. This indicates a wide range of scores with a tendency towards higher scores. Similar results were obtained by both the designated race group (mean = 40.93, SD = 5.928) and white group (mean = 40.86, SD = 5.246).

Lastly, when considering the non-academic contact between peers, a minimum of 1 and a maximum of 8 were obtained. The mean on this scale was 2.97 (SD = 1.426) for the entire sample, which indicates a tendency towards lower scores (considering the midpoint of 4.5 on this scale). The white group scored slightly higher than the designated group did on this scale, with a mean score of 3.66 (SD = 1.725), as opposed to a mean of 2.81 (SD = 1.298).

Table 26

Descriptive Statistics regarding Participants' Living Arrangements

Type of living arrangements		Sample	
		N	%
Designated group	Off campus living	119	66.1%
	On campus living	30	16.7%
	Not answered	31	17.2%
	Total	180	100%
White group	Off campus living	38	86.4%
	On campus living	4	9.1%
	Not answered	2	4.5%
	Total	44	100%
Entire sample	Off campus living	158	69.0%
	On campus living	37	16.2%
	Not answered	34	14.8%
	Total	229	100%

From the table above, it is clear that most of the participants from the entire sample (69%) indicated that they lived off campus, while only 16.2% lived on campus. The tendency to live off campus was evident in both of the race groups.

Next, Table 27 indicates the external factors present in participants' lives. These include financial responsibilities, family responsibilities, and employment responsibilities.

Table 27

Descriptive statistics regarding external factors

Post-enrolment factor		N	Min	Max	Mean	SD
Family responsibilities (Scale range: 6-42)	Designated group	180	6	41	17.72	9.190
	White group	44	6	42	15.07	9.164
	Entire sample	229	6	42	17.22	9.129
Financial responsibilities (Scale range: 5-25)	Designated group	180	5	25	14.54	6.088
	White	44	5	25	10.39	4.809
	Entire sample	229	5	25	13.70	6.026
Employment responsibilities (Scale range: 6-42)	Designated group	180	6	39	17.31	7.894
	White group	44	6	36	18.73	8.464
	Entire sample	229	6	39	17.59	7.937

The minimum score for family responsibilities was 6 and the maximum score 42, with a mean of 17.22 (SD = 9.129) for the entire sample. Scores on this scale tended to be slightly lower when considering the midpoint of 24 for the scale. On this scale, the designated group had a slightly higher mean score of 17.72 (SD = 9.190) than the white group had, with a mean of 15.07 (SD = 9.164), while both these groups tended to have lower scores when considering the midpoint of the scale.

In terms of financial responsibility, the minimum score was 5 and the maximum score 25, with a mean of 13.70 (SD = 6.026) for the entire sample. On this scale, the designated group had a higher mean score (mean = 14.54, SD = 6.088) than that of the white group (mean = 10.39, SD = 4.809).

When considering the information above, the minimum score for employment responsibilities was 6, and the maximum score was 39, which indicates a wide range of scores. The mean score for this scale was 17.59 (SD = 7.937) for the entire sample. Scores on this scale tended to be slightly lower when considering the midpoint of 24. Mean scores were 17.31 (SD = 7.894) for the designated group and 18.73 (SD = 8.464) for the white group.

5.1.3 Differences in academic success and various post-enrolment factors with regard to various pre-enrolment factors. The first research question posed in this study was the following: Are there significant differences in students' academic success and post-enrolment factors (initial educational goals, initial commitment to the HE institution, physical energy devoted to HE activities, psychological energy devoted to HE activities, academic self-concept, participation in academic activities, academic contact with staff, academic contact with peers, participation in extracurricular activities, non-academic contact with staff,

non-academic contact with peers, financial responsibilities, family responsibilities, and employment responsibilities) with regard to age, gender, race, language proficiency, high school attended, and parental levels of education?

To determine whether significant differences in academic success and the various post-enrolment factors existed, MANOVAs were completed for age, gender, race, language proficiency, high school attended, and parental levels of education respectively. Before conducting the MANOVAs, the data were examined (using SPSS Statistics) to ensure that all of the underlying assumptions were met. Box’s Test of Equality of Covariance Matrices was utilised to determine whether the data violated the assumption of homogeneity of the variance-covariance matrices. In each of the cases (age, gender, race, language proficiency, high school attended, and parental levels of education) the test Box’s M was non-significant (using $p < 0.001$) (see Table 28). The assumption of homogeneity has not been violated; therefore, Wilk’s Lambda was considered an appropriate test to use.

Table 28

Box’s Test of Equality of Covariance Matrices

Group	<i>F</i>	<i>p</i>
Age	0.987	0.522
Gender	1.227	0.046
Race	1.365	0.005
Language proficiency (tuition in first language)	1.197	0.070
High school attended	1.401	0.003
Parental levels of education (generational status)	1.085	0.248

5.1.3.1 Differences in academic success and various post-enrolment factors with regard to age. There was a statistically significant difference ($p \leq 0.01$) between traditional participants (aged younger than 23) and non-traditional participants (aged 23 and older) on the combined dependent variables ($F = 3.191$; $p = 0.000$; $\eta^2 = 0.189$). The results of the ANOVAs that were completed subsequent to the MANOVA are summarised in Table 29.

Statistically significant differences were found on four variables: Academic success ($F = 7.521$; $p = 0.007$; $\eta^2 = 0.033$); Participation in extracurricular activities ($F = 8.071$; $p = 0.005$; $\eta^2 = 0.036$); Employment responsibilities ($F = 6.062$; $p = 0.015$; $\eta^2 = 0.027$); and Family responsibilities ($F = 5.912$; $p = 0.016$; $\eta^2 = 0.026$). Traditional participants (aged younger than 23) had significantly higher scores for Academic success and Participation in extracurricular activities than non-traditional participants (aged 23 and older) had, while non-

traditional participants (aged 23 and older) reported significantly higher levels of Employment responsibilities and Family responsibilities.

Table 29

Mean Scores, Standard Deviations and F-values relating to the ANOVA for Age

Dependent variable	Age group				F	p	η^2
	Younger than 23 (n = 129)		23 and older (n = 92)				
	M	SD	M	SD			
Academic success	62.541	1.007	58.261	1.192	7.521**	0.007	0.033
Initial educational goals	28.163	0.396	28.924	0.469	1.539	0.216	0.007
Initial commitment to the HE institution	21.891	0.412	21.848	0.488	0.005	0.946	0.000
Physical energy devoted to HE activities	17.791	0.286	17.783	0.338	0.000	0.985	0.000
Psychological energy devoted to HE activities	29.054	0.484	28.500	0.573	0.546	0.461	0.002
Academic self-concept	111.442	1.288	112.293	1.525	0.182	0.670	0.001
Participation in academic activities	8.147	0.277	7.424	0.328	2.840	0.093	0.013
Academic contact with staff	54.651	0.740	55.804	0.877	1.010	0.316	0.005
Academic contact with peers	13.442	0.242	13.293	0.287	0.156	0.693	0.001
Participation in extracurricular activities	2.178	0.105	1.717	0.124	8.071**	0.005	0.036
Non-academic contact with staff	40.643	0.513	41.315	0.607	0.715	0.399	0.003
Non-academic contact with peers	2.922	0.126	3.054	0.150	0.452	0.502	0.002
Financial responsibilities	13.147	0.536	14.565	0.634	2.917	0.089	0.013
Family responsibilities	16.016	0.806	19.054	0.955	5.912*	0.016	0.026
Employment responsibilities	16.566	0.698	19.228	0.826	6.062*	0.015	0.027

** $p < 0.01$; * $p < 0.05$

Note: Because incomplete data were discarded, the total number of participants in the table above is lower than the total number of participants who completed the quantitative part of the study.

5.1.3.2 Differences in academic success and various post-enrolment factors with regard to gender. There was a statistically significant difference ($p < 0.05$) between males and females on the combined dependent variables ($F = 1.715$; $p = 0.05$; $\eta^2 = 0.11$). The results of the ANOVAs that were completed subsequent to the MANOVA are summarised in Table 30.

A statistically significant difference was found on only one variable, namely Initial educational goals ($F = 4.727$; $p = 0.031$; $\eta^2 = 0.021$). Female participants reported significantly higher scores on Initial educational goals than male participants did.

Table 30

Mean Scores, Standard Deviations and F-Values relating to the ANOVA for Gender

Dependent variable	Gender				F	p	η^2
	Male (n = 64)		Female (n = 160)				
	M	SD	M	SD			
Academic success	58.853	1.439	61.622	0.910	2.646	0.105	0.012
Initial educational goals	27.453	0.555	28.881	0.351	4.727*	0.031	0.021
Initial commitment to the HE institution	21.922	0.582	21.900	0.368	0.001	0.975	0.000
Physical energy devoted to HE activities	18.234	0.401	17.588	0.254	1.854	0.175	0.008
Psychological energy devoted to HE activities	27.781	0.685	29.350	0.433	3.752	0.054	0.017
Academic self-concept	113.500	1.813	111.106	1.146	1.246	0.266	0.006
Participation in academic activities	7.969	0.400	7.819	0.253	0.100	0.752	0.000
Academic contact with staff	55.109	1.047	55.125	0.662	0.000	0.990	0.000
Academic contact with peers	13.469	0.345	13.312	0.218	0.147	0.702	0.001
Participation in extracurricular activities	2.188	0.152	1.925	0.096	2.140	0.145	0.010
Non-academic contact with staff	40.938	0.725	40.906	0.459	0.001	0.971	0.000
Non-academic contact with peers	2.984	0.179	2.975	0.113	0.002	0.965	0.000
Financial responsibilities	14.672	0.758	13.350	0.479	2.173	0.142	0.010
Family responsibilities	17.250	1.156	17.181	0.731	0.003	0.960	0.000
Employment responsibilities	18.172	1.002	17.350	0.634	0.480	0.489	0.002

** p < = 0.01; * p < = 0.05

Note: Because incomplete data were discarded, the total number of participants in the table above is lower than the total number of participants who completed the quantitative part of the study.

5.1.3.3 Differences in academic success and various post-enrolment factors with regard to race. There was a statistically significant difference ($p < = 0.01$) between designated and white groups on the combined dependent variables ($F = 3.233$; $p = 0.000$; $\eta^2 = 0.189$). The results of the ANOVAs that were completed subsequent to the MANOVA are summarised in Table 31.

Statistically significant differences were found on five variables: Academic success ($F = 21.133$; $p = 0.000$; $\eta^2 = 0.087$); Initial educational goals ($F = 4.687$; $p = 0.031$; $\eta^2 = 0.021$); Academic self-concept ($F = 5.272$; $p = 0.023$; $\eta^2 = 0.023$); Non-academic contact with peers ($F = 13.142$; $p = 0.000$; $\eta^2 = 0.056$); and Financial responsibilities ($F = 17.789$; $p = 0.000$; $\eta^2 = 0.074$). Participants from the designated group had significantly lower levels of Academic success and reported significantly lower levels of Initial educational goals, Academic self-concept, and Non-academic contact with peers, but significantly higher levels of Financial responsibilities than white participants did.

Table 31

Mean Scores, Standard Deviations and F-Values relating to the ANOVA for Race

Dependent variable	Race Group				F	P	η^2
	Designated (n = 180)		White (n = 44)				
	M	SD	M	SD			
Academic success	59.151	0.825	67.706	1.668	21.133**	0.000	0.087
Initial educational goals	28.156	0.331	29.773	0.670	4.687*	0.031	0.021
Initial commitment to the HE institution	22.167	0.345	20.841	0.698	2.900	0.090	0.013
Physical energy devoted to HE activities	17.794	0.240	17.682	0.486	0.043	0.836	0.000
Psychological energy devoted to HE activities	28.828	0.411	29.205	0.832	0.165	0.685	0.001
Academic self-concept	110.700	1.071	116.250	2.167	5.272*	0.023	0.023
Participation in academic activities	7.906	0.239	7.682	0.483	0.173	0.678	0.001
Academic contact with staff	55.300	0.624	54.386	1.262	0.421	0.517	0.002
Academic contact with peers	13.461	0.205	12.932	0.415	1.308	0.254	0.006
Participation in extracurricular activities	2.022	0.091	1.909	0.184	0.305	0.581	0.001
Non-academic contact with staff	40.928	0.432	40.864	0.875	0.004	0.948	0.000
Non-academic contact with peers	2.811	0.104	3.659	0.210	13.142**	0.000	0.056
Financial responsibilities	14.544	0.437	10.386	0.884	17.789**	0.000	0.074
Family responsibilities	17.722	0.685	15.068	1.385	2.952	0.087	0.013
Employment responsibilities	17.306	0.597	18.727	1.207	1.115	0.292	0.005

** p <= 0.01; * p <= 0.05

Note: Because incomplete data were discarded, the total number of participants in the table above is lower than the total number of participants who completed the quantitative part of the study.

5.1.3.4 Differences in academic success and various post-enrolment factors with regard to language proficiency. There was a statistically significant difference ($p <= 0.01$) between participants who received tuition in their first language and participants who did not on the combined dependent variables ($F = 4.16$; $p = 0.000$; $\eta^2 = 0.231$). The results of the ANOVAs that were completed subsequent to the MANOVA are summarised in Table 32.

Statistically significant differences were found on six variables: Academic success ($F = 33.397$; $p = 0.000$; $\eta^2 = 0.131$); Initial educational goals ($F = 7.783$; $p = 0.006$; $\eta^2 = 0.034$), Academic self-concept ($F = 5.163$; $p = 0.024$; $\eta^2 = 0.023$); Non-academic contact with peers ($F = 8.962$; $p = 0.003$; $\eta^2 = 0.039$); Family responsibilities ($F = 4.939$; $p = 0.027$; $\eta^2 = 0.022$); and Financial responsibilities ($F = 21.685$; $p = 0.000$; $\eta^2 = 0.089$).

Participants who receive tuition in their first language had significantly higher levels of Academic success and also reported significantly higher levels of Initial educational goals,

Academic self-concept, and Non-academic contact with peers. In contrast, participants who do not receive tuition in their first language reported significantly higher scores on Family responsibilities and Financial responsibilities.

Since it was suspected that there might be an interactional effect between Language of tuition and Race, a MANOVA was conducted to test for the interactional effect (Language of tuition*Race). There was a statistically significant difference ($p \leq 0.01$) on the combined dependent variables ($F = 1.907$; $p = 0.024$; $\eta^2 = 0.122$). The results of the ANOVAs showed only two statistically significant differences: for Non-academic contact with peers ($F = 6.181$; $p = 0.014$; $\eta^2 = 0.027$) and Employment responsibilities ($F = 9.962$; $p = 0.002$; $\eta^2 = 0.043$).

Table 32

Mean Scores, Standard Deviations and F-Values relating to the ANOVA for Language Proficiency

Dependent variable	Language proficiency				F	P	η^2
	Tuition in first language (n = 44)		Tuition not in first language (n = 180)				
	M	SD	M	SD			
Academic success	69.264	1.628	58.770	0.805	33.397**	0.000	0.131
Initial educational goals	30.136	0.665	28.067	0.329	7.783**	0.006	0.034
Initial commitment to the HE institution	21.068	0.700	22.111	0.346	1.786	0.183	0.008
Physical energy devoted to HE activities	17.705	0.486	17.789	0.240	0.024	0.877	0.000
Psychological energy devoted to HE activities	28.659	0.832	28.961	0.412	0.106	0.745	0.000
Academic self-concept	116.205	2.167	110.711	1.072	5.163*	0.024	0.023
Participation in academic activities	7.545	0.482	7.939	0.238	0.535	0.465	0.002
Academic contact with staff	55.250	1.263	55.089	0.624	0.013	0.909	0.000
Academic contact with peers	13.068	0.416	13.428	0.205	0.602	0.439	0.003
Participation in extracurricular activities	2.091	0.184	1.978	0.091	0.305	0.581	0.001
Non-academic contact with staff	41.068	0.875	40.878	0.432	0.038	0.845	0.000
Non-academic contact with peers	3.545	0.212	2.839	0.105	8.962**	0.003	0.039
Financial responsibilities	10.068	0.877	14.622	0.433	21.685**	0.000	0.089
Family responsibilities	14.455	1.379	17.872	0.682	4.939*	0.027	0.022
Employment responsibilities	18.636	1.208	17.328	0.597	0.944	0.332	0.004

** $p \leq 0.01$; * $p \leq 0.05$

Note: Because incomplete data were discarded, the total number of participants in the table above is lower than the total number of participants who completed the quantitative part of the study.

5.1.3.5 Differences in academic success and various post-enrolment factors with regard to high school attended. There was a statistically significant difference ($p \leq 0.01$) between participants from non-fee-paying schools and participants from fee-paying and private schools on the combined dependent variables ($F = 2.804$; $p = 0.001$; $\eta^2 = 0.175$). The results of the ANOVAs that were completed subsequent to the MANOVA are summarised in Table 33.

Statistically significant differences were found on three variables: Academic success ($F = 9.451$; $p = 0.002$; $\eta^2 = 0.043$); Initial educational goals ($F = 15.893$; $p = 0.000$; $\eta^2 = 0.070$); and Non-academic contact with peers ($F = 6.032$; $p = 0.015$; $\eta^2 = 0.028$).

Participants from fee-paying and private schools had significantly higher levels of Academic success and reported significantly higher levels of Initial educational goals and Non-academic contact with peers than participants from non-fee-paying schools did.

Table 33

Mean Scores, Standard Deviations and F-Values relating to the ANOVA for Type of High School Attended

Dependent variable	Type of high school				F	P	η^2
	Non paying (n = 49)		Paying / Private (n = 154)				
	M	SD	M	SD			
Academic success	56.349	1.629	62.053	0.888	9.451**	0.002	0.043
Initial educational goals	26.265	0.626	29.109	0.341	15.893**	0.000	0.070
Initial commitment to the HE institution	22.653	0.651	21.715	0.355	1.600	0.207	0.007
Physical energy devoted to HE activities	17.816	0.464	17.848	0.253	0.004	0.952	0.000
Psychological energy devoted to HE activities	28.469	0.799	28.903	0.436	0.227	0.634	0.001
Academic self-concept	111.429	2.104	111.873	1.147	0.034	0.853	0.000
Participation in academic activities	7.959	0.457	7.867	0.249	0.032	0.859	0.000
Academic contact with staff	55.347	1.217	55.182	0.663	0.014	0.905	0.000
Academic contact with peers	13.755	0.393	13.285	0.214	1.104	0.295	0.005
Participation in extracurricular activities	2.041	0.173	1.964	0.094	0.154	0.695	0.001
Non-academic contact with staff	40.265	0.840	41.139	0.457	0.836	0.362	0.004
Non-academic contact with peers	2.551	0.204	3.121	0.111	6.032*	0.015	0.028
Financial responsibilities	14.755	0.866	13.491	0.472	1.644	0.201	0.008
Family responsibilities	17.061	1.326	17.073	0.723	0.000	0.994	0.000
Employment responsibilities	16.143	1.139	18.030	0.621	2.117	0.147	0.010

** $p < 0.01$; * $p < 0.05$

Note: Because incomplete data were discarded, the total number of participants in the table above is lower than the total number of participants who completed the quantitative part of the study.

5.1.3.6 Differences in academic success and various post-enrolment factors with regard to parental levels of education. There was a statistically significant difference ($p < 0.01$) between first- and continuous-generation participants on the combined dependent variables ($F = 2.956$; $p = 0.000$; $\eta^2 = 0.176$). The results of the analyses of variance (ANOVAs) that were completed subsequent to the MANOVA are summarised in Table 34.

Statistically significant differences were found on nine variables: Academic success ($F = 4.464$; $p = 0.036$; $\eta^2 = 0.020$); Initial educational goals ($F = 6.842$; $p = 0.010$; $\eta^2 = 0.030$); Initial commitment to the HE institution ($F = 14.932$; $p = 0.000$; $\eta^2 = 0.063$); Physical energy devoted to HE activities ($F = 5.987$; $p = 0.015$; $\eta^2 = 0.026$); Psychological energy devoted to HE activities ($F = 6.027$; $p = 0.015$; $\eta^2 = 0.026$); Participation in academic activities ($F = 6.531$; $p = 0.011$; $\eta^2 = 0.029$); Academic contact with staff ($F = 7.296$; $p = 0.007$; $\eta^2 = 0.032$);

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Non-academic contact with staff ($F = 7.563$; $p = 0.006$; $\eta^2 = 0.033$); and Non-academic contact with peers ($F = 4.511$; $p = 0.035$; $\eta^2 = 0.020$).

Continuous-generation participants had significantly higher levels of Academic success and reported significantly higher levels of Initial educational goals, Psychological energy devoted to HE activities and Non-academic contact with peers. In contrast, first-generation participants reported significantly higher levels of Initial commitment to the HE, Physical energy devoted to HE activities, Participation in academic activities, Academic contact with staff, and Non-academic contact with staff.

Since it was suspected that there might be an interactional effect between Generational status and Race, a MANOVA was conducted to test for the interactional effect (Race*Generational status). There was no statistically significant difference on the combined dependent variables ($F = 1.266$; $p = 0.226$; $\eta^2 = 0.084$).

Table 34

Mean Scores, Standard Deviations and F-Values relating to the ANOVA for Generational Status

Dependent variable	Generational status				F	P	η^2
	First (n = 111)		Continuous (n = 113)				
	M	SD	M	SD			
Academic success	59.198	1.088	62.435	1.079	4.464*	0.036	0.020
Initial educational goals	27.694	0.420	29.239	0.416	6.842**	0.010	0.030
Initial commitment to the HE institution	23.081	0.428	20.752	0.424	14.932**	0.000	0.063
Physical energy devoted to HE activities	18.297	0.302	17.257	0.299	5.987*	0.015	0.026
Psychological energy devoted to HE activities	28.000	0.517	29.788	0.513	6.027*	0.015	0.026
Academic self-concept	113.054	1.375	110.549	1.363	1.675	0.197	0.007
Participation in academic activities	8.405	0.300	7.327	0.297	6.531*	0.011	0.029
Academic contact with staff	56.622	0.782	53.646	0.775	7.296**	0.007	0.032
Academic contact with peers	13.703	0.260	13.018	0.258	3.503	0.063	0.016
Participation in extracurricular activities	2.081	0.115	1.920	0.114	0.977	0.324	0.004
Non-academic contact with staff	41.973	0.542	39.876	0.537	7.563**	0.006	0.033
Non-academic contact with peers	2.775	0.135	3.177	0.133	4.511*	0.035	0.020
Financial responsibilities	14.261	0.576	13.204	0.571	1.701	0.194	0.008
Family responsibilities	16.685	0.876	17.708	0.868	0.688	0.408	0.003
Employment responsibilities	16.937	0.759	18.221	0.753	1.443	0.231	0.006

** p < = 0.01; * p < = 0.05

Note: Because incomplete data were discarded, the total number of participants in the table above is lower than the total number of participants who completed the quantitative part of the study.

5.1.3.7 Summary of the significant findings with regard to Research Question 1.

With regard to the all the groups that were investigated, significant differences were found, with the greatest amount of significant differences found in the students from different race groups and generational statuses. Fewer differences were found in gender groups. With regard to the variables that were considered, significant differences were found for all the variables except for Academic contact with peers. Most of the differences related to academic success and initial education goals, while very few significant differences were found for Initial commitment to the HE institution, Physical and Psychological energy devoted to HE activities, Academic contact and Non-academic contact with staff, and Employment responsibilities.

In summary, academic success tends to be higher in traditional aged (younger than 23) students, white students, students who receive tuition in their first language, students from

fee-paying and private schools, and continuous-generation students. Initial educational goals tend to be higher in female students, white students, students who receive tuition in their first language, students from fee-paying and private schools, and continuous-generation students. Both initial commitment to the HE institution and physical energy devoted to HE activities tend to be higher in first-generation students. Psychological energy devoted to HE activities tends to be higher in continuous-generation students. Academic self-concept tends to be higher in white students and students who receive tuition in their first language. Participation in extracurricular activities tends to be higher in traditional students (aged younger than 23). Both academic contact and non-academic contact with staff, and participation in academic activities tend to be higher for first-generation students. Non-academic contact with peers tends to be higher in white students, students who receive tuition in their first language, students from fee-paying and private schools, and continuous-generation students. Employment responsibilities tend to be higher in non-traditional students (aged 23 and older). Family responsibilities tend to be higher in non-traditional students (aged 23 and older) and students who do not receive tuition in their first language. Financial responsibilities tend to be higher in students from the designated group and students who do not receive tuition in their first language.

5.1.4 Explanations for the variance in academic performance. To determine whether a significant amount of the variance in academic success can be explained by the various pre- and post-enrolment variables, different sets of standard multiple regression analyses were completed for the 1) entire sample; 2) sample split by race; and 3) sample split by year group.

Before conducting the regression analyses, the data were examined (using SPSS Statistics) to ensure that all of the underlying assumptions were met. Stem-and-leaf plots and scatterplots were considered for normality and outliers, linearity, and homoscedasticity.

5.1.4.1 Explanations for the variance in academic performance for the entire sample. Firstly, to assess the size and direction of the linear relationships between academic success and the other variables, a bivariate Pearson's product-moment correlation coefficient (r) was calculated.

In Table 35, the correlation matrix for the entire sample is provided.

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Table 35

Correlation Matrix

	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.
1. Academic success	-0.0182**	0.109	0.295**	-0.362**	0.207**	0.328**	0.140*	0.241**	-0.144*	0.071	-0.053	0.394**	0.145*	0.064	-0.031	-0.018	0.119	0.090	0.102	-0.060	-0.285**	-0.317**
2. Age	1	-0.169*	-0.030	0.099	0.107	-0.273**	0.004	0.084	-0.005	-0.001	-0.050	0.029	-0.113	0.068	-0.027	-0.189**	0.045	0.057	-0.148*	0.164*	.0162*	0.115
3. Gender		1	-0.036	-0.114	0.037	0.093	0.164*	0.144*	-0.002	-0.091	0.129	-0.075	-0.021	.001	-0.026	-0.098	-0.003	-0.002	0.069	-0.046	-0.003	-0.098
4. Race group			1	-0.689**	0.261**	0.512**	0.175**	0.144*	-0.114	-0.014	0.027	0.152*	-0.028	-0.044	-0.077	-0.037	0.236**	-0.004	-0.115	0.071	-0.115	-0.272**
5. Tuition in first language				1	-0.233**	-0.383**	-0.153*	-0.184**	0.089	0.010	0.022	-0.151*	0.049	-0.008	0.052	-0.037	-0.197**	-0.013	0.049	-0.065	.0148*	0.298**
6. Type of high school					1	0.216**	0.244**	0.264**	-0.087	0.004	0.033	0.013	-0.012	-0.008	-0.072	-0.027	0.166*	0.063	0.017	0.099	0.001	-0.088
7. Grade 12 performance						1	0.192**	0.132	-0.248**	-0.114	0.068	0.136*	0.009	-0.026	-0.134*	0.058	0.200**	0.026	0.126	0.032	-0.113	-0.201**
8. Generational status							1	0.173**	-0.251**	-0.162*	0.163*	-0.087	-0.169*	-0.178**	-0.125	-0.066	0.141*	-0.182**	0.038	0.080	0.056	-0.087
9. Goal commitment								1	0.039	0.162*	-0.213**	0.443**	0.080	0.222**	0.119	-0.016	0.147*	0.283**	0.115	-0.180**	-0.338**	-0.311**
10. University commitment									1	0.182**	-0.305**	0.194**	0.092	0.452**	0.140*	0.103	-0.099	0.431**	0.074	-0.040	-0.069	0.089
11. Physical Energy										1	-0.573**	0.325**	0.290**	0.353**	0.445**	0.042	-0.229**	0.258**	0.037	-0.113	-0.094	0.045
12. Psychological Energy											1	-0.459**	-0.291**	-0.480**	-0.391**	-0.028	0.268**	-0.407**	-0.140	0.109	0.083	-0.018
13. Self-Concept												1	0.221**	0.490**	0.184**	0.066	-0.024	0.503**	0.181*	-0.273**	-0.452**	-0.265**
14. Participation academic activities													1	0.190**	0.196**	0.172**	-0.018	0.201**	-0.007	-0.144*	-0.117	-0.050
15. Academic contact with staff														1	0.223**	0.100	-0.088	0.874**	0.092	-0.219**	-0.192**	-0.087
16. Academic contact with peers															1	0.087	-0.225**	0.186**	0.125	-0.030	-0.007	0.056
17. Participation in extracurricular																1	-0.101	0.114	0.277**	0.045	0.024	0.065
18. Non-academic contact with peers																	1	-0.031	-0.141	-0.055	-0.230**	-0.097
19. Non-academic contact with staff																		1	0.098	-0.228**	-0.262**	-0.173**
20. Living arrangements																			1	-0.065	-0.137	-0.082
23. Financial responsibilities																						1

Factors and experiences related to academic success

	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.	16.	17.	18.	19.	20.	21.	22.	23.	
22. Family responsibilities																						1	0.349**
21. Employment responsibilities																					1	0.490**	0.101

** p < = 0.01; * p < = 0.05

Several variables showed a significant correlation with academic success. Firstly, with regard to the categorical variables: Academic success showed significant bivariate correlations with Age ($r = -0.182$; $p \leq 0.01$); Race ($r = 0.295$; $p \leq 0.01$); Tuition in first language ($r = -0.362$; $p \leq 0.01$); Type of high school ($r = 0.207$; $p \leq 0.01$) and Generational status ($r = 0.140$; $p \leq 0.05$). Correlations with categorical variables should be considered with extreme caution, however. In terms of the correlation between the continuous variables and academic success, significant positive correlations were observed with Grade 12 performance ($r = 0.328$; $p \leq 0.01$); Goal commitment ($r = 0.241$; $p \leq 0.01$); Self-Concept ($r = 0.394$; $p \leq 0.01$); and Participation in academic activities ($r = 0.145$; $p \leq 0.05$). Significant negative correlations were observed between academic success and University commitment ($r = -0.144$; $p \leq 0.05$); Family responsibility ($r = -0.285$; $p \leq 0.01$); and Financial responsibility ($r = -0.317$; $p \leq 0.01$).

The standard multiple regression analysis employed to assess how much variance in academic success could be explained by all the pre- and post-enrolment variables together yielded an R of 0.607 and R^2 of 0.369, indicating that the variables together explain 36.9% of the variance in participants' academic success. This is statistically significant on the 1% level of significance ($F = 4.085$; $p = 0.000$).

In Table 36, the individual contribution of each of the variables is indicated. The unstandardised (B) and standardised (β) regression coefficients and squared semi-partial correlations (sr^2) for each predictor in the regression model are reported. Considered individually, three variables uniquely explained a significant amount of variance in academic success: Age uniquely explained 1.9% ($\beta = -0.161$; $p = 0.034$); Tuition in first language uniquely explained 1.8% ($\beta = -0.203$; $p = 0.036$); and Self-concept uniquely explained 7.7% ($\beta = 0.414$; $p = 0.000$).

Table 36

Unstandardised (B) and Standardised (β) Regression Coefficients and Squared Semi-partial Correlations (sr^2) for Each Predictor in a Regression Model Predicting Academic Success for the Entire Sample

Variable	B	β	sr	sr^2	p
Age	-3.885	-0.161*	-0.137	0.019	0.034
Gender	1.225	0.045	0.041	0.002	0.527
Race group	-1.847	-0.062	-0.038	0.001	0.550
Tuition in first language	-6.019	-0.203*	-0.136	0.018	0.036
Grade 12 performance	0.105	0.051	0.036	0.001	0.577
Type of high school	3.944	0.134	0.118	0.014	0.068
Generational status	1.284	0.054	0.047	0.002	0.467
Goal commitment	-0.136	-0.051	-0.040	0.002	0.533
University commitment	-0.245	-0.097	-0.075	0.006	0.242
Physical energy	0.274	0.072	0.053	0.003	0.412
Psychological energy	0.152	0.071	0.048	0.002	0.454
Self-concept	0.331	0.414**	0.277	0.077	0.000
Participation in academic activities	0.409	0.104	0.091	0.008	0.156
Academic contact with staff	-0.055	-0.041	-0.017	0.000	0.788
Academic contact with peers	-0.190	-0.043	-0.037	0.001	0.565
Participation in extracurricular activities	-0.764	-0.075	-0.067	0.004	0.294
Non-academic contact with peers	0.356	0.043	0.036	0.001	0.574
Non-academic contact with staff	0.035	0.017	0.007	0.000	0.910
Living arrangements	1.264	0.041	0.036	0.001	0.574
Financial responsibilities	-0.117	-0.059	-0.049	0.002	0.449
Family responsibilities	-0.110	-0.085	-0.061	0.004	0.344
Employment responsibilities	0.170	0.111	0.092	0.008	0.152

** $p \leq 0.01$; * $p \leq 0.05$

The unique contributions of the set of pre-enrolment factors and the set of post-enrolment factors were considered by entering/removing these sets of variables from the regression model respectively. The result of this is summarised in Table 37.

Table 37

Regression Results

Model	R	R^2	F	P	R^2 change	F change	p of F change
1	0.607	0.369	4.085**	0.000			
2	0.519	0.270	3.966**	0.000	-0.099	3.438**	0.002
3	0.426	0.182	5.367**	0.000	-0.187	3.034**	0.000

** $p \leq 0.01$; * $p \leq 0.05$

Model 1 – Complete set with all 22 variables

Model 2 – Set with 15 post-enrolment variables

Model 3 – Set with 7 pre-enrolment variables

From this table, it is clear that all three models (Model 1 – Complete set with all 22 variables; Model 2 – Set with 15 post-enrolment variables and Model 3 – Set with 7 pre-

enrolment variables) predicted a significant amount of variance in participants' academic success. Both the sets of pre-enrolment and post-enrolment variables made a unique significant contribution.

5.1.4.2 Explanations for the variance in academic performance in various race groups. Research question: Can a significant amount of the variance in academic success of students from designated and white groups be explained by the various pre-enrolment (age, gender, language proficiency, Grade 12 performance, high school attended, and parental levels of education) and post-enrolment factors (initial educational goals, initial commitment to the HE institution, physical energy devoted to HE activities, psychological energy devoted to HE activities, academic self-concept, participation in academic activities, academic contact with staff, academic contact with peers, participation in extracurricular activities, non-academic contact with staff, non-academic contact with peers, living arrangements, financial responsibilities, family responsibilities, and employment responsibilities)?

For participants from the designated group: The standard multiple regression analysis used to assess how much variance in academic success can be explained by all the pre- and post-enrolment variables together yielded an R of 0.562 and R^2 of 0.316, indicating that the variables together explain 31.6% of the variance in participants' academic success. This is statistically significant on the 1% level of significance ($F = 2.619$; $p = 0.001$).

In Table 38, the individual contribution of each of the variables is indicated. The unstandardised (B) and standardised (β) regression coefficients and squared semi-partial correlations (sr^2) for each predictor in the regression model are reported. Considered individually, four variables uniquely explained a significant amount of variance in academic success: Age uniquely explained 2.6% ($\beta = -0.197$; $p = 0.037$); Type of high school uniquely explained 2.4% ($\beta = 0.174$; $p = 0.044$); Self-concept uniquely explained 5.7% ($\beta = 0.384$; $p = 0.002$); and University commitment uniquely explained 2.7% ($\beta = -0.219$; $p = 0.034$).

Table 38

Unstandardised (B) and Standardised (β) Regression Coefficients and Squared Semi-partial Correlations (sr^2) for each Predictor in a Regression Model Predicting Academic Success for Participants from the Designated Group

Variable	B	β	sr	sr^2	<i>p</i>
Gender	3.835	0.151	0.130	0.017	0.090
Age	-4.485	-0.197*	-0.160	0.026	0.037
Tuition in first language	-0.606	-0.013	-0.011	0.000	0.880
Type of high school	4.455	0.174*	0.155	0.024	0.044
Grade 12 performance	-0.127	-0.050	-0.042	0.002	0.581
Generational status	-0.051	-0.002	-0.002	0.000	0.979
Self-concept	0.294	0.384**	0.238	0.057	0.002
Goal commitment	-0.342	-0.133	-0.104	0.011	0.171
University commitment	-0.520	-0.219*	-0.163	0.027	0.034
Physical energy	0.646	0.166	0.121	0.015	0.114
Psychological energy	0.115	0.056	0.039	0.002	0.603
Academic contact with staff	-0.228	-0.178	-0.072	0.005	0.343
Academic contact with peers	-0.281	-0.068	-0.058	0.003	0.442
Participation in academic activities	0.315	0.088	0.077	0.006	0.311
Participation in extracurricular activities	0.596	0.062	0.055	0.003	0.472
Non-academic contact with peers	0.130	0.015	0.013	0.000	0.867
Non-academic contact with staff	0.357	0.194	0.076	0.006	0.317
Living arrangements	0.906	0.032	0.027	0.001	0.718
Financial responsibilities	-0.187	-0.100	-0.084	0.007	0.270
Family responsibilities	-0.135	-0.109	-0.079	0.006	0.301
Employment responsibilities	0.239	0.162	0.131	0.017	0.087

** $p \leq 0.01$; * $p \leq 0.05$

For participants from the white group: The standard multiple regression analysis used to assess how much variance in academic success can be explained by all the pre- and post-enrolment variables together yielded an R of 0.939 and R^2 of 0.882, indicating that the variables together explain 88.2% of the variance in participants' academic success. This is statistically significant on the 1% level of significance ($F = 5.620$; $p = 0.001$).

In Table 39, the individual contribution of each of the variables is indicated. The unstandardised (B) and standardised (β) regression coefficients and squared semi-partial correlations (sr^2) for each predictor in the regression model are reported. Considered individually, four variables uniquely explained a significant amount of variance in academic success: Gender uniquely explained 3.6% ($\beta = -0.286$; $p = 0.048$); Tuition in first language uniquely explained 12.7% ($\beta = -0.619$; $p = 0.001$); Self-Concept uniquely explained 13.7% ($\beta = 0.655$; $p = 0.001$); and Participation in extracurricular activities uniquely explained 10.4% ($\beta = -0.521$; $p = 0.002$).

Table 39

Unstandardised (B) and Standardised (β) Regression Coefficients and Squared Semi-partial Correlations (sr²) for each Predictor in a Regression Model Predicting Academic Success for Participants from the White Group

Variable	B	β	sr	sr²	P
Gender	-8.252	-0.286*	-0.191	0.036	0.048
Age	-1.898	-0.073	-0.041	0.002	0.650
Tuition in first language	-17.857	-0.619**	-0.356	0.127	0.001
Grade 12 performance	0.281	0.132	0.079	0.006	0.384
Generational status	1.996	0.074	0.050	0.003	0.578
Self-concept	0.536	0.655**	0.370	0.137	0.001
Goal commitment	0.484	0.189	0.093	0.009	0.311
University commitment	0.456	0.165	0.104	0.011	0.261
Physical energy	0.194	0.062	0.022	0.000	0.809
Psychological energy	0.791	0.367	0.093	0.009	0.308
Academic contact with staff	-0.361	-0.251	-0.068	0.005	0.458
Academic contact with peers	0.215	0.044	0.027	0.001	0.764
Participation in academic activities	1.736	0.366	0.143	0.020	0.128
Participation in extracurricular activities	-5.762	-0.521**	-0.322	0.104	0.002
Non-academic contact with peers	1.062	0.148	0.103	0.011	0.264
Non-academic contact with staff	0.907	0.387	0.107	0.011	0.245
Living arrangements	4.180	0.105	0.060	0.004	0.507
Financial responsibilities	-0.106	-0.040	-0.025	0.001	0.783
Family responsibilities	0.517	0.394	0.144	0.021	0.124
Employment responsibilities	0.071	0.047	0.034	0.001	0.707

** p <= 0.01; * p <= 0.05

The unique contributions of the set of pre-enrolment factors and the set of post-enrolment factors were considered by entering/removing these set of variables from the regression model respectively. The result of this is summarised in Table 40.

Table 40

Contributions of the different sets of variables with regard to race group

Race group	Model	R	R²	F	p	R² Change	F change	p of F change
Designated	1	0.562	0.316	2.619**	0.001			
	2	0.488	0.238	2.605**	0.002	-0.078	2.258*	0.042
	3	0.327	0.107	2.681*	0.017	-0.209	2.423**	0.004
White	1	0.939	0.882	5.620**	0.001			
	2	0.851	0.725	3.514**	0.005	-0.157	4.009*	0.016
	3	0.597	0.357	3.328*	0.017	-0.525	4.463**	0.003

** p <= 0.01; * p <= 0.05

Model 1 – Complete set with all 21 variables

Model 2 – Set with 15 post-enrolment variables

Model 3 – Set with 6 pre- enrolment variables

From this table, it is clear that all three models (Model 1 – Complete set with all 21 variables; Model 2 – Set with 15 post-enrolment variables; and Model 3 – Set with 6 pre-enrolment variables) predicted a significant amount of variance in participants' academic success. For both the race groups, the set of pre-enrolment and post-enrolment variables made a unique significant contribution.

5.1.4.3 Explanations for the variance in academic performance in various year groups. Research question: Can a significant amount of the variance in academic success of first-, second-, third-, fourth- and fifth-year students be explained by pre-enrolment (age, gender, race, language proficiency, Grade 12 performance, high school attended, and parental levels of education) and post-enrolment factors (initial educational goals, initial commitment to the HE institution, physical energy devoted to HE activities, psychological energy devoted to HE activities, academic self-concept, participation in academic activities, academic contact with staff, academic contact with peers, participation in extracurricular activities, non-academic contact with staff, non-academic contact with peers, living arrangements, financial responsibilities, family responsibilities, and employment responsibilities)?

The unique contributions of the set of pre-enrolment factors and the set of post-enrolment factors were considered by entering/removing these set of variables from the regression model respectively for each of the year groups. The result of this is summarised in Table 41.

Table 41

Contributions of the Different Sets of Variables with regard to Year Group

Year group	Model	R	R ²	F	p	R ² change	F change	p of F change
1 (N = 51)	1	0.886	0.785	2.159	0.077			
	2	0.661	0.437	1.034	0.464	-0.348	3.010*	0.041
	3	0.529	0.280	1.554	0.190	-0.505	2.038	0.102
2 (N = 39)	1	0.872	0.760	1.293	0.358			
	2	0.786	0.618	1.725	0.145	-0.142	0.757	0.635
	3	0.444	0.197	1.293	0.358	-0.563	1.405	0.309
3 (N = 35)	1	0.921	0.848	1.526	0.314			
	2	0.811	0.658	1.670	0.180	-0.190	1.074	0.474
	3	0.602	0.362	1.703	0.163	-0.486	1.282	0.402
4 (N = 44)	1	0.898	0.806	2.261	0.073			
	2	0.846	0.715	3.177**	0.010	-0.091	0.800	0.602
	3	0.585	0.342	2.002	0.092	-0.464	1.910	0.132
5 (N = 60)	1	0.712	0.506	1.026	0.476			
	2	0.455	0.207	0.505	0.918	-0.299	1.906	0.117
	3	0.569	0.324	2.535*	0.031	-0.182	0.542	0.888

** $p < 0.01$; * $p < 0.05$

Model 1 – Complete set with all 22 variables

Model 2 – Set with 15 post-enrolment variables

Model 3 – Set with 7 pre- enrolment variables

From this table, it is clear that the prediction value of the total model (Model 1 – Complete set with all 22 variables) was not significant for any of the year groups. The set of post-enrolment factors (Model 2 – Set with 15 post-enrolment variables) predicted a significant amount of variance only in fourth-year participants' academic success ($R = 0.846$; $R^2 = 0.715$; $F = 3.177$; $p = 0.01$). In addition to this, the set of pre-enrolment factors (Model 3 – Set with 7 pre-enrolment variables) predicted a significant amount of variance only in fifth-year participants' academic success ($R = 0.569$; $R^2 = 0.324$; $F = 2.535$; $p = 0.031$).

5.1.4.4 Summary of the significant findings with regard to research questions 2 and 3. For the entire sample of participants, the complete set of variables, as well as the separate sets of pre- and post-enrolment variables, explained a significant amount of the variance in students' academic success, with the individual variables Age, Tuition in first language and Self-concept providing unique explanations.

For the participants of the designated group, the complete set of variables, as well as the separate sets of pre- and post-enrolment variables, explained a significant amount of the variance in students' academic success, with the individual variables Age, Type of high school, Self-concept and University commitment providing unique explanations.

For participants from the white group, the complete set of variables, as well as the separate sets of pre- and post-enrolment variables, explained a significant amount of the variance in students' academic success, with the individual variables Gender, Tuition in first language, Self-concept and Participation in extracurricular activities providing unique explanations.

Results regarding the predictive value of the various sets of variables with regard to the academic success for specific year groups were mostly not significant.

5.2 Qualitative Results

The main aim of the qualitative section of this study was to gain contextual information regarding students' experiences of academic success and factors they associate with being an academically successful student. The main themes and subthemes that emerged from the thematic analysis are summarised in Table 42. These themes were determined by firstly identifying individual codes that appeared in transcripts frequently, whereafter the codes were organised into broader, overarching themes. Finally, the relationships between codes, themes and the different levels of themes were carefully considered to form an idea of the significance of individual themes.

Table 42

Main Themes and Subthemes resulting from the Thematic Analysis

Main themes	Subthemes
Defining academic success	Obtaining distinctions Reaching academic goals Satisfaction with performance Acquiring and applying new skills and knowledge
Profiling an academically successful student	Motivated High academic self-concept Effective time-management skills Balanced Resilient
Behaviours of an academically successful student	Class attendance Spending time on academic tasks Making use of successful study methods Participating in extracurricular activities
The influence of significant individuals on academic success	Lecturers Academic peers Social peers Family
Other aspects and their impact on academic success	Gender Race Age High school experiences Working part-time Financial stress Living arrangements

While the themes were salient to the six focus group discussions, there were also areas of difference and nuance. These are highlighted in the discussion.

A discussion of the themes forms the foundation of the remainder of this section, with each main and subtheme illustrated by exact quotations from the discussions. According to Smith, Larkin, and Flowers (2009), the trustworthiness of the data can be increased by including direct quotes from the original data. Only quotations that provided the best explanations of the ideas and perceptions and the best depictions of students' feelings were included.

In presenting verbatim quotations, minor alterations have been made to enhance their readability. Generally, insignificant hesitations, repetitions, and expressions such as *mmm* and *uhm* have been removed. Dotted lines within brackets (...) indicate information that was omitted, whereas square brackets [...] indicate information that has been added (i.e., to explain what a participant is referring to). Dotted lines at the beginning or end of a quotation show

that the participant was talking prior to or after the quotation. All identifying data have been removed, but a descriptor with the gender of the participant and the focus group in which the statement was made, is included at the end of each quotation.

5.2.1 Defining academic success The first main theme illustrated participants' definition and/or perception of academic success. Participants did not display any considerable difficulty in answering this question, and similar themes came to light in the different focus groups. It seems that participants highlighted quantitative definitions of academic success (focussed on specific marks/results), and the more holistic aspects of academic success (student satisfaction, resilience etc.). Participants from all focus groups agreed that academic success is more complicated than considering only the marks that a student obtained. The main subthemes are discussed in more detail below.

5.2.1.1 Obtaining distinctions. Obtaining distinctions or achieving a certain level of academic performance was highlighted in all focus group discussions as part of the participants' definition of academic success. Most of the participants agreed that their level of academic performance, or more specifically, obtaining a distinction, defined academic success. The following statements illustrate participants' perceptions regarding distinctions: "*Being academically successful would be doing good and getting A's – straight A's ja!*" (female participant, focus group 2), and "*...you want to achieve certain marks for subjects...*" (male participant, focus group 2), and "*Well, on a personal level, it is [getting] distinctions more than anything for me and if I could I would urge everyone to strive for distinctions...*" (male participant, focus group 6).

5.2.1.2 Reaching academic goals. Although obtaining distinctions was pointed out in all six of the focus groups, participants also stated that reaching the personal academic goals that a student sets out to achieve forms part of the definition of academic success. Participants acknowledged that not all students have the ability to obtain a distinction, but if a student worked hard to reach his or her academic goals (be it obtaining a distinction or 60%), he or she could be classified as being academically successful. By using statements such as "*I think it is when you get the certain percentage that you've set for yourself...*" (female participant, focus group 1); "*... I think academic success is getting what you are aiming for or higher...*" (male participant, focus group 4); and "*... we are not all 'A' students, but then we all have our own goals. Once you reach that goal that you set, then you are academically successful*" (female participant, focus group 5), participants indicated that they understood

that each student's academic success should be determined individually, based on that particular student's abilities, rather than having a generic definition for academic success.

5.2.1.3 Satisfaction with performance. Participants discussed satisfaction with their academic performance as another defining aspect of academic success. Participants linked satisfaction and reaching the academic goals that they set for themselves, and indicated that, if students are satisfied with their results, they have achieved academic success. The following statements show the perceptions regarding satisfaction with results: *"Probably I think ... you just want to feel good ... because you know you are on this certain level..."* (male participant, focus group 1) and *"... Just being happy with your results. For me, that is academic success"* (female participant, focus group 4).

5.2.1.4 Acquiring and applying new skills and knowledge. Most of the focus group discussions also pointed towards a more holistic view of academic success by taking into account the skills and knowledge that students acquire and apply during their academic careers. These views seem to move away from a strict quantitative evaluation of academic success. The following quotations illustrate participants' perceptions that the acquisition and application of skills and knowledge can form part of a definition of academic success; *"...very importantly, it is to be able to apply what you have learnt..."* (male participant, focus group 2); *"...I feel like knowing what you are doing and having a full understanding of what you are doing ... is academic success for me"* (male participant, focus group 4); and *"Being able to understand all work and actually implement it..."* (male participant, focus group 2). The following participant even regarded skills and knowledge as more important than obtaining certain marks: *"...the distinctions also count, but what count for me more is gaining knowledge. That is going to stay with you, not distinctions. Well, distinctions will be able to open some doors for you, but what are you going to do with those distinctions once those doors are open and you don't remember what you have studied? So it's all about gaining knowledge for me"* (male participant, focus group 6).

5.2.2 Profiling an academically successful student. Participants included several aspects and characteristics of an academically successful student. In their discussions, participants voiced many opinions regarding what they regarded the characteristics of a successful student. These subthemes are discussed next.

5.2.2.1 Motivated. Most of the participants agreed that academically successful students are motivated to reach their goals. The following participant regarded motivation as so important that he indicated that support from peers and family will not help at all if a person is not intrinsically motivated to work hard: *“I think it [academic support from peers/family] plays no role because it [success] comes with being intrinsically motivated. If you are motivated from within you don’t need anything, you can do it you know...”* (male participant, focus group 3). Furthermore, participants had different views with regard to which factors contribute to higher levels of motivation. On the one hand, it seemed that obtaining success will lead to higher levels of motivation, as seen in this quotation: *“... but I think when you have reached your goal it motivates you and you want to do more. You feel like you can do this...”* (female participant, focus group 4). On the other hand, participants pointed out that in many cases, adverse circumstances will push a student to want to do better and be better. These adversities, such as language barriers, financial stress, working part-time, and family stressors, are discussed in detail in the sections that follow. In the following statement, a participant explained how challenging family circumstances enhanced his motivation: *“I think it pushes you more; it drives you to actually achieve and get that qualification”* (male participant, focus group 4).

5.2.2.2 High academic self-concept. Many participants regarded a high academic self-concept as an important characteristic of an academically successful student. Participants were of the opinion that students who have a clear view of their own academic capabilities and are also confident in these abilities are more likely to be successful. *“...some students are still trying to find themselves ... you can see a significant difference between them [students with low levels of academic self-concept versus high levels of self-concept] in the way they speak, the way they present their ideas and the way they express their ideas...”* (male participant, focus group 6). It seemed that participants regarded it as important to have a clear set of expectations of oneself and to work hard to reach these expectations, with the firm belief that one is able to be successful academically. Lastly, participants agreed that academically successful students do not compare themselves with others, but focus on their own abilities. These views are reflected in the following statements: *“... if you fail you are like, ok, I’m failing, now I am not as good as them. Whereas you [should be] reflecting on yourself and not comparing yourself to other people”* (female participant, focus group 3); and *“... Because if you want to be successful academically, you have to have your own*

expectations that you want to reach and have your own way, your own path to get there..." (male participant, focus group 6).

5.2.2.3 Effective time-management skills. Participants were in agreement that effective time- and stress-management skills are vital components of being an academically successful student. These skills were mentioned in every focus group. It seems that most of the participants were of the opinion that being able to plan and prioritise are very important factors in reaching success: *"For me I think it is doing what is required and having good discipline. Knowing when to do things and then enjoying yourself (...). So it's being flexible and disciplined"* (male participant, focus group 3); and *"Because you have to stand on your own and you have to sort out your timetable and you have to study even though people are having a party"* (female participant, focus group 4). This participant compared procrastination with an epidemic, as the following statement illustrates: *"...Procrastination I would like to say is like an epidemic. I think if doctors were able to prescribe any pills for it, they would have helped us all as students (...). With a positive attitude, you are able to see everything you need to do. You need to put it down there and set certain dates and times and deadlines for each and everything you do..."* (male participant, focus group 6).

5.2.2.4 Balanced. Participants were largely of the opinion that academically successful students could be regarded as being balanced. They defined a balanced student as an individual who can balance his or her academic, social, occupational, and extracurricular activities. The following participant felt that being more involved with activities outside the academic sphere will ensure an increase in productivity: *"...what I've seen with many people as well, is normally the people that achieve well academically, they also get involved with campus activities or off-campus activities that are recreational of a kind. So I've noticed the more things you do, the more you get done (...). if you occupy [yourself] with activities that are constructive, then ja, it overflows to your academics as well"* (female participant, focus group 1). Furthermore, balance was linked to effective time-management skills in many of the conversations, and it seemed that participants viewed time-management skills as a prerequisite for being a balanced student. These views and opinions are illustrated by the following statements: *"...I think that a successful student, from my point of view, is someone that can balance everything. It doesn't help being academically successful but then you neglect every other part of your life. So it would be someone that knows how much time to commit to work and to social and to this and that and how to balance everything and still come out where you want to be at the end"* (female participant, focus group 3); and *"...the*

more activities the person have, maybe it might actually push them in the right direction..." (male participant, focus group 6).

5.2.2.5 Resilient. Another more holistic view of academic success was pointed out by participants in several of the focus group discussions. The following participant's statement shows the significance of resilience: *"I feel like if you can bounce back, maybe if you got bad marks and you can actually bounce back [then you are academically successful]"* (female participant, focus group 4). They were of the opinion that students who do not give up and can "bounce back" after failure could be considered academically successful. Furthermore, the importance of a positive mindset was also highlighted as being part of academic success, as illustrated by the following quotations: *"...Because if you don't have that right mindset to be able to conjure up the right ideas to get you where you need to go, you are not going anywhere at all..."* (male participant, focus group 6); and *"...you struggle you know, but now the mindset has changed more to 'I want to know this'. And then you are more likely to go and find out and just work on it, even if it gets tough"* (female participant, focus group 2). Lastly, participants explained that failure should be seen as a valuable learning opportunity, but that the end goal should be kept in mind in order to reach success: *"...So now the journey begins. There's going to be short cuts, there's going to be potholes (...) there's going to be people trying to stop you from getting there. You as a person just need to know that this is what I need to do. This is what I'm aiming for, and I need to do this or get this to achieve this..."* (male participant, focus group 6).

5.2.3 Behaviours of an academically successful student. Participants had similar views on the behaviours that academically successful students portray. Although most of these actions were academically focussed (attending classes, spending time on academic tasks, and making use of effective study methods), they also included participation in extracurricular activities as being important in achieving success. This aspect was linked to being a balanced student, as discussed in the previous section. All of these aspects are discussed in more detail below.

5.2.3.1 Class attendance. Participants had opposing views regarding class attendance. Some participants had strong opinions regarding the importance of attending classes: *"I think it is when you (...) attend every single class, if you feel like it or not"* (female participant, focus group 1). Others were of the opinion that attending classes was a waste of time and that it would be more valuable to study the work by oneself. For example:

“Sometimes you go to the class and you get those lectures that are going to read stuff which they are going to upload on Blackboard [online learning platform]. So what is the point of me going there if you are going to explain the same slides that will be on Blackboard? And I can actually interpret them my own way...” (female participant, focus group 5). Participants agreed that if students could gain more knowledge and information than just the information in the textbook, attending classes was regarded as important. Conversely, if lecturers just repeated information, class attendance was regarded as a waste of time. Thus, it would seem that lecturers’ presentation styles affected students’ willingness to attend class. Furthermore, the size of the class also seemed to play a role. Participants stated that the probability of attending classes was higher when classes were smaller. Lastly, the relationship with lecturers seemed to be of importance. Lecturers that were more willing to make personal connections with students increased the likelihood of class attendance. This can be seen from the following quote: *“So I would say [the fact] that we have close relationships with our lecturers is part of the reason why I keep going to class”* (male participant, focus group 6). The relationship with lecturers is discussed in more detail later.

5.2.3.2 Spending time on academic tasks. All participants agreed about the importance of devoting time to academic tasks. Some participants were of the opinion that this aspect was even more important than attending classes. The following participant regarded keeping up with work as one of the most important actions of an academically successful student: *“I’d say being able to stay on top of your work. I’ve learnt very painfully in first year that if you don’t keep up with your work then you are obviously going to fall behind and it is going to be a mission and a half to catch up. So stay on top of it every day. As you get work, go through the work, study the work and don’t let it pile up...”* (female participant, focus group 3). Participants explained that several factors could affect the time that is available for academic activities (these are discussed later: social interactions with peers, family responsibilities, working part-time, and extracurricular activities). However, participants also stated that with balance and time management, enough time will be available for academic tasks.

5.2.3.3 Making use of successful study methods. Participants discussed effective study methods as part of the skills that an academically successful student will have. The following quotation indicates the importance of effective study methods: *“...and I know a lot of students actually suffer from a lack of proper study methods, [because] people study for ten hours then they still go and fail...”* (female student, focus group 1). Effective study methods

and spending time on academic activities and tasks were connected, and participants regarded keeping academic work up to date as part of having effective study skills. Furthermore, participants were of the opinion that effective study methods would save time and ensure that information could be recalled in tests and examinations. Lastly it seemed that participants thought that very few students came to HE equipped with effective study methods and that this affected academic success negatively.

5.2.3.4 Participating in extracurricular activities. Participants were of the opinion that it is important for students to learn how to cope with a variety of tasks and expectations already during their HE careers, because when they graduate, they will have to be able to cope with their work, families, social life, and other activities. Furthermore, participants indicated that being able to cope with different tasks and expectations contributes to a positive self-concept, as indicated by the following quotation: *“But, like, being on committees teaches you to grow as a person. Having to balance stuff, because you have to remember that when you work or something, you are not only going to be going to work, one day you are going to be a mother. You will have to take care of your kids and drop them off at school. Having to juggle all of these things really helps you grow. You know, after you are done you are, like, ‘Wow, that was tough work, but I actually did it’”* (female participant, focus group 5); and *“...what I’ve seen with many people as well is normally the people that achieve well academically, they also get involved with campus activities and off-campus activities that are recreational of a kind. So I’ve noticed the more things you have to do, the more you get done, and if you occupy yourself with activities that are constructive, then ja, it overflows to your academics as well”* (female participant, focus group 1). Being a well-rounded individual seemed to be an indicator of success. Another positive aspect that was highlighted by participants regarding participation in extracurricular activities is that it creates a sense of belonging in a certain community. The following statement illustrates this: *“But I also feel it is nice to know that you are part of something. It is a nice feeling to know that, OK, I am contributing something to this varsity. Like I am not just focusing on my studies and all that stuff. I actually do extra stuff”* (male participant, focus group 4). From the discussion above, it would seem that participation in extracurricular activities contributes positively to student success and satisfaction if successful time-management strategies are in place.

5.2.4 The influence of significant individuals on academic success. In the sections below, it is illustrated that participants identified a variety of people who they thought played a role in their academic success, namely lecturers and academic staff,

academic peers, social peers, and family members. Opposing views surfaced in terms of the effect of these groups of people on academic success. While participants agreed that the people by whom they were surrounded played an important role in their academic success, different views emerged in terms of how exactly interactions with family, peers, and lecturers affected their motivation, levels of stress, and ultimately their academic success.

5.2.4.1 Lecturers. Most participants were of the opinion that lecturers and other academic staff play an important role in students' academic success. Participants valued lecturers that were willing to go beyond just presenting a class and viewed this as an important part of support from lecturers: *"I think it's great if a lecturer does take the time to go above and beyond the hours they have set out for the year to give lectures. If a lecturer is willing to help you, I think it can help in a positive way."* (male participant, focus group 3). Furthermore, it seemed that the relationship between lecturer and student was regarded as a very significant aspect in students' attitudes towards a specific module and how motivated they were to achieve good marks in a module. The more open lecturers were to accommodate students, and the more effort lecturers put in to get to know students, the more positive their role in student success was perceived. This student explained the importance of the student-lecturer relationship: *"...I have different lecturers, for say my Biology, the lecturers there know you. They know your capabilities and they actually know your name. Like, if you are writing a test or whatever, you are also motivated because they want to help you and they want you to pass"* (male participant, focus group 4).

On the other hand, if lecturers were perceived as unwilling to accommodate students or as disinterested in forming closer relationships with students, student behaviours were affected negatively. Participants stated that they would be less likely to approach lecturers when they needed help, not as motivated to attend classes, and their motivation to put in extra effort in these lecturers' modules was significantly lower. The following quotations show the negative effect of lecturers' approach on students: *"But coming back to lecturers, I think it could help if we could get help from them, but sometimes I find lecturers intimidating and for that reason I just don't go to them. I avoid them like the plague"* (female participant, focus group 3); and *"And then I have my lecturers in Geography where they do not even know which number you are and they don't even care. It is sad because it is not open. They say they have an open door policy, but they don't because it is hard for you to walk up to a lecturer that do not even know who you are"* (male participant, focus group 4).

Another negative aspect that participants highlighted was favouritism. If students felt that lecturers had favourites, their levels of motivation were lower. The following participant explained that it felt as if it is of no use to try and achieve good marks, because the lecturer had already decided who the academic achievers of the class were: *“Lecturer support is nice, but it is not nice when it has favouritism. Like there are certain lecturers who know certain names and already in class they are like number one. And when you write a test it is like ‘who is going to beat him, who is going to beat him’. Already you are like, OK, I am studying, but there is already a number one...”* (male participant, focus group 4).

Conversely, some participants felt that lecturers did not play a role in their success at all, and that the responsibility was solely on the student to make sure that he/she achieved success, as illustrated by this statement: *“I think support from your lecturers doesn’t help because I’m intrinsically motivated and I choose to do it because I want to and even if the lecturer doesn’t help me, I’m going to find a solution. As I said, it is all about being motivated”* (male participant, focus group 3).

5.2.4.2 Academic peers. Most participants agreed that academic relationships with peers is an important and necessary aspect of success because peers with the same academic goals and ambitions than themselves would motivate them to keep working hard to achieve those goals: *“I think to associate yourself with positive people. Those people who kind of like talk about school stuff and what not”* (male participant, focus group 3); and *“...You want to have a support system where people want to study, want you to succeed. Like we are going in the same direction and we all have the same goal. So it is amazing when you find a group of people where it is not weird when I say, ‘Let’s go and study’. It is nice to surround yourself with those kinds of people”* (female participant, focus group 4).

Being involved with like-minded students was also equated to having additional academic support. Students valued the fact that academic interaction with peers enabled them to clarify concepts and gain understanding and insight into academic aspects while working together. The following statements illustrate participants’ views regarding the positive effect of academic interaction with peers: *“Make groups in class. Always be around groups that will help you”* (male participant, focus group 3); *“You want to create an environment where you are able to go to someone and ask for help, like genuinely ask for help, like I do not understand this”* (female participant, focus group 4); and *“Because I think we have to be like*

a community. We have to take care of each other even though you know your goals personally, but then we also have to support each other” (male participant, focus group 3).

5.2.4.3 Social peers. When it came to the effect of social relationships with peers, three main ideas emerged from the discussions. Firstly, participants acknowledged that social interactions with peers can help alleviate the stress and pressure of being a student and that social interactions can allow for periods of rest and relaxation between academic activities. According to participants, this will have a positive effect on levels of motivation and academic efforts, as these statements reflect: *“Like when it is time to have a social life, because that is important, it plays an important part to your academic success. Because if you are always just like ‘I have to, I have to, I have to’ you are going to burn out, do you understand? So it is nice to have relationships with your friends”* (male participant, focus group 4); and *“But you know, social contact with friends and actually laughing and doing something fun does change things for me personally and makes me happy. And for me happy means I am going to want to try again and actually do something”* (female participant, focus group 5).

On the other hand, participants mentioned that social interactions could be distracting and could in fact have a negative effect on academic success if not managed properly, as shown by the following quotation: *“Sometimes the social aspects of your life can be a bit distracting. Even if you don’t mean for it to be. Sometimes you just get carried away and forget about your responsibilities for a little bit, then afterwards you have to catch up again”* (female participant, focus group 3). Participants highlighted the importance of choosing the right friends in order to be able to manage social activities successfully: *“You want to surround yourself with the people who have the same goals. So you know where you guys are going in life. There is no point in surrounding yourself with people who only care about partying”* (male participant, focus group 4).

Lastly, many of the participants indicated the importance of balance; allowing themselves time for social interactions, but having the ability not to let the social aspects interfere with their academic motivation and efforts. The following quotation illustrates this point of view: *“I think it is important to be able to say ‘I want to be comfortable with my social life and I want to be comfortable with my studies’. Because it is important to feel like you can balance everything”* (male participant, focus group 4).

5.2.4.4 Family. Participants highlighted several aspects with regard to family interactions, circumstances and situations that they perceived to affect academic success. Firstly, being the first member of their family to attend an HE institution was discussed by participants. Contrasting opinions and views emerged regarding the effect of being a first-generation student. Firstly, participants indicated that being a first-generation student led to added stress and pressure because hopes and dreams of everyone in the family rested on their shoulders and if they did not succeed, it would cause much disappointment. This statement shows how being a first-generation student may lead to higher levels of stress: *“And you want to impress everyone, because you are the only one that went to varsity and everyone is looking up to you”* (male participant, focus group 4). However, on the other hand, being the first family member to attend HE offered them much support and a certain measure of respect from family members, as shown by the following: *“I’m the first one to go to university in my father’s family and what I have in mind is like in future I will always be that person who is respected by other people. I will always have that kind of status when I’m going to my family”* (male participant, focus group 3); and *“I think it plays an important role [in the amount of support that you get] because being the first in your family will ensure that you get a lot of support from your family to succeed”* (male participant, focus group 3).

Also, the participants that were not first-generation students indicated that this could cause higher levels of stress and more pressure from family members due to comparisons with other family members that had attended HE institutions. Participants stated that, if their older siblings obtained their degrees, pressure was put on them to do the same. This point of view is illustrated by the following statements: *“In respect to having other members in your family having degrees already, I think it puts a bit of pressure on you as a person. Because your family knows there are other people who have succeeded and have got their degrees and are making successes of themselves, they expect you to do it as well”* (female participant, focus group 3); and *“I am not the first but the second, but it puts a lot of pressure on me because every time you find yourself being compared to your older sibling, which is not fair because she is not me”* (female participant, focus group 5).

Lastly, participants were of the opinion that having family responsibilities, like looking after children, would definitely add to the stress of having to complete a degree, but that it would also drive individuals to be more successful, because they would want to complete their degrees as soon as possible. The following participant summarised this aspect as follows: *“I think the worries about providing for your family do play a role, because it*

gives you a sense of urgency that will make you do as much as you can do to get your degree” (male participant, focus group 3).

5.2.5 Other aspects and their effect on academic success. Participants discussed several other aspects that could affect the academic success of students. Varied opinions emerged regarding the effect of gender, race, age, high school experiences, working part-time, financial stress, and living arrangements on academic success. Participants seemed to be of the opinion that gender does not have a significant effect on academic success, but they were divided in terms of the effect of the other aspects on academic success. According to participants, it seemed that race and age did not affect academic success, but rather factors related to race and age. In terms of all the other aspects, different opinions emerged. These aspects are discussed in more detail below.

5.2.5.1 Gender. Most participants agreed that gender alone will not determine whether a student is successful or not. They stated that it is more important to work hard and to be motivated and committed to academic work. The following illustrates these views with regard to gender: *“I think gender has got nothing to do with it. It has got nothing to do with it because you find that a successful male student and a successful female student, they all have similarities. How they answer questions, how they tackle problems and their lifestyle. In fact everything. It’s not about gender at all. Gender has got nothing to do with it”* (male participant, focus group 3); and *“So with the characteristics in terms of gender, it doesn’t really apply for me. It is based on what you do with what you have”* (male participant, focus group 6).

5.2.5.2 Race. Participants perceived the effect of race on academic success as more complex than gender. They stated that race in isolation should not have an effect on academic success, but several aspects related to race could affect success. Firstly, participants pointed out an existing stereotype that white students are regarded as smarter than black students/students from other designated groups are, even when academic performance results do not always support this stereotype. This view affects the academic self-concept of students from designated groups negatively and makes them feel inferior. This black student admitted that she was raised to see white people as superior and was still struggling with this mindset: *“I feel like that plays a role because we see them at the top and we are at the bottom. Which is how I used to think as well. Even now still, although I am here and we are all, you know,*

together and what not, I still view them as superior to me because that is how I grew up and what I was taught" (female participant, focus group 4).

The second aspect that was highlighted in terms of race was participants' perceptions with regard to lecturers' approach to different races. Participants were of the opinion that lecturers go to greater lengths to tailor specifically Afrikaans-speaking (mostly white) students' PowerPoint presentations and give more detailed directions as to what to study for tests and exams than with English-speaking (mostly black) students. Participants stated that this treatment will benefit Afrikaans-speaking students and could lead to them performing better. The following quotation illustrates these views: *"The excuse normally is that they are taught in Afrikaans and the books are in English, so for example slides and stuff must be in more detail because the books are in English, which is not fair"*(female participant, focus group 4).

Another issue that was raised by participants is the fact that white students might have had a more privileged upbringing and they have access to more resources. This view is evident in the following statement: *"...I would think that the dude is white, so he has to have more advantages than I do"* (male participant, focus group 6).

Lastly, participants discussed language as a factor that has an indirect effect on academic success. Participants indicated that students from backgrounds other than English and Afrikaans (mostly black students) might struggle with a language barrier because they attend lectures in their second or third language. These language barriers could affect academic performance negatively. *"Language can be a barrier as well. For instance, we can discuss and explain better in Tswana than in English"* (male participant, focus group 6).

From the discussion above, it seems that participants are of the opinion that race in itself does not determine academic success, but that factors related to race may affect student success.

5.2.5.3 Age. When participants discussed the effect of age on academic success, different points of view surfaced. Some of the participants stated that maturity, and not necessarily age, is important for academic success. They were of the opinion that more mature students will be aware of the importance of focusing on their academic work and maintaining a balance in terms of social activities and other responsibilities. The following statement illustrates these views: *"As the saying goes, the more mature one grows, the more the mind*

broadens, or something like that. So I think more mature people are more likely to have self-control when it comes to their studies” (male participant, focus group 6).

A second important aspect that participants discussed was that being sure of who you are and what you want to achieve are more important than being a certain age. Participants said that students who are unsure of themselves and their educational and academic goals are more likely to drop out. They agreed that these aspects are not related to age because some students will need time to gain self-knowledge and others will be confident of their goals right after school. The following participant summed it up as follows: *“I’d say it depends on the person. A lot of people can come directly into varsity and cope fine but others need a bit of a gap to find themselves and get hold of the way they learn and find out what they want to do first before they come [to HE]. Because I’ve seen a lot of people come [to HE] just because they were supposed to come and then they did not know what they are doing and they don’t know how to cope and then they end up dropping out”* (female participant, focus group 3).

5.2.5.4 High school experiences. Participants discussed various different ways in which they thought a student’s high school experience might affect academic success at an HE institution. The first aspect that was discussed was the negative effect that attending an underprivileged school had on academic success. Participants mentioned that rural, underprivileged schools provided little or no exposure to English as academic language and had limited resources available. Students who attended these schools would enter HE with a disadvantage in terms of academic language proficiency, and technological skills (e.g., the use of computers for assignments). Participants were of the opinion that these aspects will affect their chances of success negatively, as the following statement shows: *“I feel like they [people from privileged schools] got the better deal of it. In terms of, there is more exposure, like people have typing as a module, I never had typing in school. Like it’s just that they are exposed to certain things that certain people in certain other schools are not exposed to”* (female participant, focus group 4).

Secondly, participants highlighted the effect of the quality of teachers during their high school years. When teachers are knowledgeable, disciplined and focussed on learning, students are likely to be better prepared for and more motivated to achieve success when they enter HE. Participants agreed that better schools tend to employ better teachers. The importance of teachers is shown by the following quote: *“In public schools, the teachers generally don’t encourage you to do better and to do well. They just give you what they are*

supposed to give you and that is about it and now you must do the rest. And they don't explain: this is how you go forward with it. And when I went to a private school, the teachers there actually care about whether or not you make a success of yourself. If I stayed in public school, I would not have been as determined as I am now" (female participant, focus group 3).

The next issue that participants pointed out was the importance of the school structure, rules and disciplinary procedures. They proposed that schools with higher expectations of their learners in terms of appropriate behaviour will instil discipline and values in their learners – aspects that are important for academic success. This view is illustrated by the following: *"I think it is the schools, because, let's disregard teachers and learning and the content and everything. The rules and how the school is operated [are important]. If the school is strict then you are, like, it's possible that I can be a successful student, because you are disciplined and you know what is right and wrong, and you know when to do it"* (male participant, focus group 3).

Lastly, some participants were of the opinion that attending a disadvantaged school could also have some positive effects on academic success. They postulated that students from underprivileged schools regarded studying at an HE as a great opportunity and will be more likely to work harder to succeed than students who take educational opportunities for granted. The following participant presented this view as follows: *"I always feel like the kids who were underprivileged in their school are the ones who work so hard and succeed more. They outperform all the kids that went to those big schools with the big names. We take things lightly, whereas they know that for me to understand it will take me a month, and they actually do it"* (female participant, focus group 5).

5.2.5.5 Working part-time. Participants had several opinions with regard to the effect of working part-time on the academic success of students. Firstly, participants pointed out that working will take valuable time away from academic tasks and that this could lead to more stress and pressure, which will have a negative effect on academic success. This is illustrated by the following: *"Well, I think it [working part-time] has a negative effect definitely. From personal experience I had a friend last year and he tried to balance his work and school stuff and it didn't work out well. It was pressure from both sides and he was sort of stuck in the middle and he reached a point where he had to choose which one he wanted to pursue further, but what happened was that both failed. He failed academically and he was*

fired from work, so I definitely think it has a negative impact” (male participant, focus group 6).

On the other hand, participants were of the opinion that, if the nature of the part-time work is related to their field of study, it could provide valuable experience, a positive aspect especially for future job applications. For example: *“For me, if that part-time job has to do with my modules, then I think it will be positive, because nowadays after a degree you are asking yourself: where will I work without experience?”* (male participant, focus group 3); and *“With me, personally I need the work because I have been doing promotional work. As a marketing student, I need to have a formidable resumé. I’m not going to apply for a job with just my degrees, uhh, a formidable resume, when I put it there, they can see that I have worked at seven places and I have a work ethic...”* (male participant, focus group 6).

Another positive aspect regarding working part-time that was highlighted by participants is that working part-time could alleviate stress regarding finances. If a student is able to supplement money received from parents and/or bursaries, it could reduce financial stress, as illustrated by the following quote: *“That’s where the positive part [of working part-time] comes in. If you have work, you may be able to support yourself financially, but it also depends on time management, of course”* (male participant, focus group 6). The effect of financial stress is discussed in more detail later.

Lastly, participants pointed out that, similar to participation in extracurricular activities, time-management skills and the ability to balance academic aspects and work are crucial aspects to consider. These views are clear from the following statement: *“Personally, I did and I didn’t agree with what you have said, because I think it [working part-time] can be positive and negative. On the negative side, like he’s saying about how it can affect your school work, I won’t lie, it does affect school work. Now, the most important thing is time management, because if you know that you are going to work from Friday to Sunday, the whole week should be dedicated to one thing and one thing only: school”* (male participant, focus group 6).

5.2.5.6 Financial stress. Participants raised several opinions regarding the effect of financial stressors on academic success. Firstly, participants explained that stress about financial matters could affect academic success negatively. Several reasons for this view were given. Firstly, the higher levels of stress could take students’ attention away from their

academic work. This is illustrated by the following statement: *“Because stuff like them [my parents] not being able to pay my tuition, I don’t think that is something I really need to know when I am going to be writing exams and tests. Because that is all that I am going to worry about”* (female participant, focus group 5). Lastly, not having basic needs, like nutrition, met, will affect students’ overall abilities to focus on their studies. Moreover, not being able to get to class due to a lack of finances will also affect their success negatively: *“Certain things like that can help you because now at the end of the day electricity being paid on time is not going to help just you, but everybody in the house to study. It is a conclusive working environment that can just boost everybody to work to get a certain result for their school work”* (male participant, focus group 6).

Secondly, despite the pressure it entails, participants highlighted the positive effect of limited finances on academic success. They were of the opinion that if students were aware of the financial strain that their studies put on their parents, it would motivate students to make sure that they did their best to pass every year so as not to waste their parents’ hard-earned money or lose their bursaries. For example: *“I’m still under my mom, she still pays my fees and then I become stressed when she has to give me cash to pay for school. You know, that hard cash that she has to pay and then you know that there is no food at home. So it gives me that pressure to push myself in school to do better so that I can repay my mom”* (male participant, focus group 3).

5.2.5.7 Living arrangements. Participants raised several benefits and disadvantages of living in a residence on campus, as well as living off campus. In terms of living on campus, the first benefit participants raised was the fact that facilities and resources on campus are easily accessible. This is illustrated by the following statement: *“I think that staying in a res could make facilities here at varsity more accessible to you because it is within walking distance, which could ultimately benefit your learning. The closer you are to the facilities, the more readily available they are and the easier for you to use them”* (male participant, focus group 3).

A second benefit of living on campus was that students who live on campus have to spend less time travelling to and from class, which gives them more time for their academic work. The following statements indicate these views: *“Distance counts; with the nearer you are to campus, the more time you have on your studies, depending on how the events are or what the schedule of events are”* (male participant, focus group 6); and *“For example, for*

people who like, stay off campus, you have to be off campus so that you can catch a taxi by five o'clock, so that means that you are not going to finish your assignment, you are not going to have access to internet. If you have a Blackboard test, how are you going to do those, you are not going to be able to do those if you are not on campus” (female participant, focus group 4).

Another positive aspect that was discussed in terms of living on campus is the fact that students who live in residences on campus have less financial concerns (such as paying rent and electricity timely and budgeting for transport) than commuter students have. For example: *“And off-campus you have to worry about things like ‘uhm man I do not have money for electricity or money for rent’”* (female participant, focus group 5). Thus, it would seem that living arrangements could affect students’ levels of financial stress.

On the other hand, a negative aspect of living in a residence on campus is the fact that students have to participate in many compulsory activities that take time away from their studies. For example: *“Speaking of residences, sometimes it is a bit negative. It’s good that you are close to everything, but residences have certain activities that you must take part in and some of them are compulsory to certain students, especially first years. And it can take away from your work and what you are supposed to be doing...”* (female participant, focus group 4).

Finally, some participants also pointed out a benefit of living off campus, namely that students’ are exposed to the real world and have to learn to cope with several responsibilities, which develops them as individuals: *“I think off-campus teaches you how to ... how the real world is really. I feel like res kind of protects you ... So I feel like off campus really teaches you how life is”* (male participant, focus group 4); and *“Because you have to stand on your own and you have to sort out your own timetable and you do have to study even though people are having a party”*(female participant, focus group 4).

5.2.6 Summary of qualitative findings. As set out above, five main themes were identified, with each of the main themes comprising several subthemes. While participants often agreed on the importance of a certain aspect, they had differing views of the effect of these aspects. While some participants pointed towards positive effects, others highlighted the negative effect that some of these factors could have on student success.

Firstly, participants pointed towards the complexity of academic success by including both quantitative (obtaining distinctions and reaching academic goals) and qualitative (being satisfied with own academic performance and the ability to acquire and apply skills and knowledge) aspects in their definitions of success. Moreover, they pointed out several other aspects related to success, such as high levels of motivation, high levels of academic self-concept, effective time-management skills, resilience, spending adequate time on academic tasks, making use of effective study methods, and participation in extracurricular activities.

Next, participants proposed various predictors of academic success. These included successful interactions (academic and non-academic contact) with lecturers and peers, and the effect of family on academic success. It is important to note that all of these groups of individuals could have either a positive or negative effect on student success, based on the type and quality of the interactions. Other factors that participants highlighted included gender, race, age, high school experiences, working part-time, financial stress, and living arrangements.

5.3 Chapter Summary

In the quantitative section of this chapter, the reliability of the various scales that were used in this study was discussed. Then, descriptive information regarding certain trends in the data were provided. The last sections of the quantitative section examined the results pertaining to the inferential statistics in answer to the research questions. The qualitative section of the chapter focussed on contextual information regarding students' experiences of academic success and factors they associated with being a successful student. While the quantitative section of the chapter was aimed at answering the first three research questions, the qualitative section was focussed on answering the fourth and final research question. In the next chapter, the results are discussed and integrated.

Chapter 6: Discussion

The aim of this chapter is to discuss the quantitative and qualitative findings of this study in relation to the theoretical framework utilised in this study, as well as previous research findings in the field, to link the results of the current study with existing literature on the topic of academic success. Before attending to the results related to the various research questions, an overview of interesting descriptive results with regard to the data set in general is discussed. Then, both the quantitative and qualitative findings will be discussed, as they relate to the research questions formulated for this study. The chapter concludes with a summary of the main arguments.

6.1 Findings with regard to Descriptive Aspects of the Demographic and Continuous Variables

Firstly, when considering the demographic characteristics of the sample of this study (with regard to gender, age, and race), interesting tendencies emerged. In terms of gender, it was noteworthy to see that the study consisted of more female than male participants, which is consistent with findings in the field of student success. International and South African studies have shown that more females than males are enrolled, not only in HE, but specifically in the humanities (Brock, 2010; CHE, 2010; Kuh et al., 2006; McKenzie & Schweitzer, 2001). Similarly, upon examining the age of the participants in the study, it was clear that greater numbers of non-traditional students (23 years and older) participated. This might imply that more non-traditional students are enrolled, which is in accordance with current trends in HE, internationally and in SA (Miller Brown, 2002; Ross-Gordon, 2011; Walters & Koetsier, 2006). Finally, the sample had a diverse racial composition, with the greatest representation of black students. International tendencies show that student bodies are becoming progressively more diverse, while the majority of /South African student bodies currently comprise black students (DOE, 2008; DHET, 2014a; Social Science Research Council Project, Transitions to College from Theory to Practice, 2005; Steyn et al., 2014), as was the case in this study.

Secondly, when considering the academic success of participants in this study, an academic average of 60.86% was achieved. Although this rate is sufficient to pass the academic year when considering it dichotomously, it is a relatively low average when examining it from a continuous point of view. Some of the other descriptive statistics of this

study, such as participants' language proficiency (language of tuition), Grade 12 performance (AP scores), the type of high school participants attended, and parental levels of education (first-generation versus continuous-generation students) could aid in understanding these low academic success rates. It was noteworthy to see that almost 80% of participants in the study received tuition in a language different from their home language. Language proficiency challenges remain especially salient in the South African context with its eleven official languages, and it has been shown that they have a negative effect on student success (Anderson et al., 2004; CHE, 2010; Van Rooy & Coetzee-Van Rooy, 2015). Furthermore, overall, participants had AP scores that were below the entry requirements for the mainstream three-year curriculum, and a considerable number of participants attended non-fee-paying public high schools, which could be indicative of the fact that students are underprepared for the academic challenges of HE (Basson, 2006; Jama et al., 2008). Another important finding was that almost half of the participants of the study reported that they were the first-generation in their family to attend HE. South African researchers showed that large numbers of first-generation students and students from low socio-economic backgrounds are entering HE institutions (Mentz, 2012; Jama et al., 2008), which is consistent with the results of this study. The effect of all of these aspects on academic success is discussed in more detail in the sections below.

Thirdly, several interesting tendencies emerged from the self-report measures that were utilised in this study. Despite participants' lower rates with regard to academic success, they reported to have above-average levels (in relation to the scale norm average) of academic self-concept, commitment to their academic goals, and commitment to the HE institution (all of which could be expected to contribute positively to academic success). Therefore, it could be possible that participants responded in a socially desirable manner to portray a more favourable image of themselves (Van de Mortel, 2008) or that participants overestimated their own academic-related abilities (Trautwein et al., 2006). Another interesting but somewhat conflicting finding was that, although participants reported only average levels (in relation to the scale norm average) of psychological energy (motivation) devoted to their academic careers, they reported above-average levels (in relation to the scale norm average) of physical energy (behaviours) devoted to their academic careers. This contradicts what research has shown, namely that higher levels of psychological energy or motivation will lead to higher levels of physical energy or positive academic behaviours (Coetzee, 2011; Onete et al., 2012; Sikhwari, 2014). It is possible that participants once again could have portrayed their

academic behaviours (physical energy) as more positive than they really were, because behaviours are very visible, while a more realistic picture of motivation (psychological energy) has been given because it is perceived as less observable and more internal. In terms of participants' academic contact and academic involvement (time spent on academic activities), another noteworthy finding came to light. Participants reported high levels (in relation to the scale norm average) of academic contact with their lecturers and peers, but had low levels of academic involvement. Thus, it could be possible that participants were very dependent on their lecturers and peers for academic support, but did not spend adequate time on academic activities independently. Moreover, participants reported lower levels (in relation to the scale norm average) of social interaction with peers and lower levels of participation in extracurricular activities, and most participants indicated that they lived off campus. Research showed that living off campus would increase the time that students have to spend travelling to and from campus; therefore, less time will be available for other activities (Bowen et al., 2009; Jones et al., 2008; Inkelas et al., 2007). In the case of the participants of this study, it could be that they had less time available for social interactions and extracurricular activities because of the time they dedicated to travelling to and from class. Lastly, participants reported low to average levels (in relation to the scale norm average) of external responsibilities (family responsibilities, financial responsibilities, and employment responsibilities). This is an interesting finding, given the high number of non-traditional students (23 years and older) that formed part of the study and the fact that especially non-traditional students typically are faced with multiple roles and responsibilities (McCormick, 2011; Rautopuro & Vaisanen, 2001; Ross-Gordon, 2011).

6.2 Differences in Students' Academic Success and Post-Enrolment Factors with regard to Demographic and Pre-Enrolment Factors

In this section, the results related to Research Question 1 are discussed. With regard to Research Question 1, it was hypothesised that various significant differences in academic success and post-enrolment factors will exist between the various groupings. In the following paragraphs, the significant results are discussed according to each of the pre-enrolment factors, namely participants' age, gender, race, language of tuition (language proficiency), type of high school participants attended, and the parental levels of education (first-generation versus continuous-generation).

6.2.1 Differences with regard to age (traditional students versus non-traditional students). In terms of participants' age, several significant differences were found. Firstly, traditional students (younger than 23 years) were more successful academically than their non-traditional counterparts (23 years and older) were. Secondly, while traditional students reported higher levels of participation in extracurricular activities than non-traditional students did, non-traditional students reported higher levels of employment and family responsibilities.

Previous research studies point out that different factors play a role in the academic success of traditional and non-traditional students and that differences in the academic success of these two groups are more likely to be the result of their different roles and responsibilities, rather than their academic abilities. Furthermore, according to research, one of the main reasons that traditional students perform better academically is the fact that they have fewer responsibilities to contend with (Glass & Harrington, 2002; McCormick, 2011; Rautopuro & Vaisanen, 2001; Ross-Gordon, 2011; Walters & Koetsier, 2006). This could also be a possible explanation in this study.

From the results, it can be hypothesised that, since traditional students had lower levels of employment and family responsibilities, they had more time available to participate in extracurricular activities. The benefits of participation in extracurricular activities in students' academic and social integration and ultimately their academic success have been indicated in several previous research studies (Inkelas et al., 2007; Lehr et al., 2004; Pike & Kuh, 2005), while the negative effect of high levels of family and employment responsibilities on the integration and success of students have also been indicated previously (Kuh, 2008; Pascarella, 2001; Pike et al., 2008; Rhodes, 2008; Stebleton & Soria, 2012; Strayhorn, 2012; Thomas, 2002; Wood & Turner, 2011).

Considering these results, it might be deduced that age not necessarily affects academic success, but that aspects related to age, such as the amount of responsibilities and consequently the time available for academic and social activities on campus, contribute to the differences in academic success between traditional and non-traditional students. This finding is in accordance with the results of Bean and Metzner (1985), McCormick (2011), Rautopuro and Vaisanen (2001), and Ross-Gordon (2011) who agreed that not age, but other factors account for the different academic performances of traditional and non-traditional students.

6.2.2 Differences with regard to gender (male versus female students). In this study, no significant differences were found with regard to the academic success of male and female students. Previous studies examining the effect of gender on academic success yielded conflicting findings. While some researchers state that female students are academically more successful than males (Akgun & Ciarrochi, 2003; Al-Emadi, 2003; Baker, 2004; Chow, 2007; Linver et al., 2002), others could not find any gender differences (Fraser & Killen, 2003; Keeve et al., 2012; Mentz, 2012; Pitoniak & Yeld, 2013; Sikhwari, 2007; Strydom & Mentz, 2010). Results of this study seem to support the latter.

This study yielded only one significant gender difference, namely that female students had higher levels of commitment to their initial educational goals than their male peers had. This finding corresponds with research by Al-Dossary (2008), and Pascarella and Terenzini (1980), who postulated that females had higher levels of commitment to their educational goals and also had more pronounced educational goals than male students had.

6.2.3 Differences with regard to race (designated group versus white group). Upon examining the differences between participants from different race groups (designated group versus white group), various significant results became apparent. First of all, participants from the white group were academically more successful than their counterparts from the designated group were. Next, participants from the white group had better AP scores (Grade 12 performance), attended better high schools, and had parents with higher levels of education than participants from designated group had. Moreover, white participants reported higher levels of commitment to their initial educational goals, higher academic self-concepts, and higher levels of non-academic interaction with peers. Conversely, participants from the designated group reported higher levels of financial responsibilities than their white peers did.

From these results, it is clear that remnants of the history of racial segregation in SA still affect the academic and educational opportunities of students from designated race groups. Several theories on student success reiterate the importance of pre-enrolment factors such as Grade 12 performance, type of high school attended, and parental levels of education (Bean & Metzner, 1985; Berger & Milem, 1999; Braxton et al., 2004; Jama et al., 2008; Kuh et al., 2006; Pascarella & Terenzini, 1980, Reason et al., 2005; Tinto, 1975). The fact that white students had better AP scores, attended better high schools, and had parents with higher levels of education provides them with an advantage over students from the designated group and might serve as an explanation for their higher levels of academic success in HE.

Furthermore, Tinto's (1975, 1993) opinion that pre-enrolment factors affect students' initial educational goals directly and ultimately affect academic success can clarify why the white participants had higher levels of commitment to their initial educational goals and greater academic success. In addition to this, various researchers postulate that previous positive academic experiences and successes contribute to higher levels of academic self-concept, which in turn affect future academic performances positively (Dambudzo, 2009; Sanchez & Sanchez Roda, 2003).

White participants reported higher levels of non-academic (social) interaction with their peers than participants from the designated group did. Tinto (1975) highlighted the importance of social interaction in students' integration and success, and Stanton-Salazar (2004), and Stanton-Salazar and Spina (2005) showed that non-academic contact with peers could provide students with access to academic resources and promote an ideology of academic achievement among students, which would contribute to success positively.

Finally, participants from the designated group reported higher levels of financial responsibilities than white participants did. The negative effect of external factors (such as financial responsibilities) on student success has been reported extensively (Bean & Metzner, 1985; Braxton et al., 2004; Cabrera et al., 1992; Jama et al., 2008; Kuh et al., 2006; Reason et al., 2005; Tinto, 1993). The combined effect of all of the above-mentioned differences could be the reason for the differences in the academic success of students from different race groups, rather than the fact that race as such could account for this difference. This finding is thus in accordance with findings by Brock (2010), Castro-Salazar and Bagley (2010), and Ogbu (1986), who postulated that other factors (such as socio-economic background, school background, and acculturation) account for differences in the academic success of students from different racial backgrounds.

6.2.4 Differences with regard to language proficiency (tuition in first language or not). When examining the importance of language proficiency (receiving tuition in a first language or not), it was noteworthy to see that participants who received tuition in their first language were more successful on an academic level than were students who did not receive tuition in their first language. As stated previously, because eleven official languages exist in SA, the effect of language on academic success has been investigated by several researchers in SA (Gunning, 2002; Heugh, 2000; Van Zyl, 2009; Yeld, 2003). These researchers point out that students who do not receive tuition in their first language achieve markedly lower scores

on measures of academic success than their peers who do receive tuition in their first language do. This is because CALP skills have not developed adequately in students receiving tuition in a language other than their own (Cummins, 1984; Yeld, 2003). Moreover, Naudé et al. (2011) pointed out that language proficiency has a more pronounced effect on academic success in the case of non-mother tongue speakers. All of these aspects could aid in the explanation of the differences in the academic success of these two groups of participants.

Additionally, participants who received tuition in their first language had higher levels of commitment to their educational goals, as well as higher academic self-concepts. Therefore, it could be hypothesised that, because students who receive tuition in their first language have better developed CALP skills, the probability is higher that they could have had more positive experiences in terms of previous academic endeavours, which could have an effect on their more positive commitment to their educational goals and also their higher levels of academic self-concept.

Next, participants who received tuition in their first language had more non-academic contact with their peers. This finding possibly could be explained by Cummins's (1984) theory, which shows that students' underdeveloped BICS could affect their ability to interact with their peers negatively, and could partially explain the lower levels of non-academic interaction with peers (CHE, 2010; Gunning, 2002; Heugh, 2000). This notion also links with Bourdieu's (1984) theory of cultural capital and that students who enter HE in a language that is not their home language will find it difficult to adapt to the discourse related to social class that students acquire, which has a strong effect on their academic performance on HE level (Boughey, 2002; Leibowitz, 2005).

Finally, participants who did not receive tuition in their first language had higher levels of financial and family responsibilities than participants who received tuition in their first language had. These responsibilities possibly could have a negative effect on the time they would have available for non-academic interactions with peers. It has been shown that financial and family responsibilities have a negative effect on student success (Dass-Brailsford, 2005; Jeffreys, 2012; Mdyogolo, 2012; Sadler & Erasmus, 2005; Toutkoushian & Smart, 2001) and could further explain the differences between the academic success rates of the two groups of participants. Thus, the results of this study indicate the importance of language proficiency in academic success and other aspects related to academic success.

6.2.5 Differences with regard to the type of high school attended. Considering differences with regard to the type of high school attended, three significant findings came to the fore: Participants from fee-paying public high schools and private high schools were academically more successful, had higher levels of commitment to their educational goals, and reported higher levels of non-academic interaction with their peers than did participants who had attended non-fee-paying public schools.

Thus, the results of this study support the notion of several other international and SA researchers that foundational competencies and higher-order cognitive skills are developed during high school education to prepare individuals for the challenges of HE (Fakude, 2012; Jones et al., 2008; Kuh et al., 2006; Leibowitz et al., 2009). In South Africa, the majority of non-fee-paying rural schools are underresourced and do not have the infrastructure or adequately qualified staff to develop the competencies in learners that they would need for success in HE (Jones et al., 2008; Mouton et al., 2013; Stephen et al., 2004). Students who are underprepared for HE are likely to be less able to set realistic educational goals. Lastly, according to Bourdieu (1977, 1984, 1986), cultural capital could possibly explain the lower levels of non-academic interaction with peers among participants from non-fee-paying schools. In accordance with this theory, students who have attended poorer schools with less exposure to quality education might also feel less comfortable to interact with their peers who have been exposed to quality education and are more comfortable in the HE sphere.

6.2.6 Differences with regard to parental levels of education (first-generation versus continuous-generation students). Lastly, when the differences between continuous and first-generation students were examined, some interesting and contrasting results became evident. The first significant finding was that continuous-generation students were academically more successful, had higher levels of commitment to their educational goals, devoted more psychological energy to their academic careers, and reported higher levels of non-academic interaction with their peers than their first-generation peers did. Conversely, first-generation participants reported higher levels of commitment to the HE institution, physical energy (behaviours) devoted to their academic careers, participation in academic activities, and academic and non-academic contact with staff than their continuous-generation peers did.

Cloete (2001), Eccles (2005), and Kuh et al. (2007) indicated that students who have parents with higher levels of education will be more successful academically. Moreover, these

researchers postulate that continuous-generation students have been exposed to educational experiences that would shape their aspirations and motivations for their HE careers positively. Parents with HE experiences can contribute positively to the motivation of their children. In addition, according to Bourdieu's (1977, 1984, 1986) cultural capital theory, due to their higher levels of cultural capital, continuous-generation students could feel more comfortable to interact with like-minded peers on a social level than first-generation students would. All of the above arguments could clarify the findings of this study with regard to continuous-generation students.

Interestingly, first-generation participants reported higher levels of commitment to the HE institution. In contrast to this, some researchers believe that a family tradition of attending a specific HE institution heightens students' levels of commitment to the institution (Tinto, 1975, 1993). However, research by Morris (2002) could offer an explanation for this interesting finding, namely that first-generation students view their graduation as a means to change their living situations significantly, which would increase their levels of commitment. It is also possible that, because first-generation students are appreciative of the opportunity to study, they are more committed to the HE institution in general than their continuous-generation peers are.

Next, first-generation participants reported higher levels of physical energy (behaviours) devoted to their academic careers, and greater participation in academic activities. It could be possible that the first-generation group felt that it was necessary to work harder than their continuous-generation peers did due to their lack of experience and/or support from parents. Finally, in terms of the higher levels of academic and non-academic interaction with staff, it may be possible that first-generation students depend on their lecturers to lend support with regard to their HE experience, because their parents are unable to provide the support and guidance that they require (Pike & Kuh, 2005).

6.3 Predictors of Academic Success

In this section, the results related to research questions 2 and 3 are discussed. With regard to Research Questions 2 and 3, it was hypothesised that the various variables (and the sets of pre- and post-enrolment factors) would explain a significant amount of variance in academic success. Furthermore, it was hypothesised that the various variables would explain a significant amount of variance in academic success of both race groups (designated and white

groups), but that the predictive value of the various variables would be different for the two groups. In addition to this, it was hypothesised that the predictive value of pre-enrolment factors would decrease, while the predictive value of post-enrolment factors would increase as students mature in their academic career. In the sections that follow, the results pertaining to the entire sample, the various race groups and the different year groups are discussed separately.

6.3.1 Predictors of academic success for the entire sample. In this study, when considering the entire sample, the complete set of variables and the separate sets of pre- and post-enrolment factors explained a significant amount of variance in students' academic success. In terms of the individual variables that provided unique explanations for the variance in academic success, students' age (uniquely explained 1.9%), language of tuition (uniquely explained 1.8%), and academic self-concept (uniquely explained 7.7%) were significant.

The fact that the complete set of variables explained a significant amount of variance in the entire sample's academic success confirms the complexity of the construct *academic success*. These results correspond with the majority of the models and approaches to academic success. An integrated approach that incorporates several demographic and pre- and post-enrolment factors is needed to understand and predict student success fully (Astin, 1984; Bean & Metzner, 1985; Braxton et al., 2004; Cabrera et al., 1992; Kuh et al., 2006; Milem & Berger, 1999; Pascarella & Terenzini, 1980; Reason et al., 2005; Spady, 1970; Strydom & Mentz, 2010; Tinto, 1975; Wilson-Strydom, 2010). This study, in accordance with previous work in the field (Astin, 1984; Bean & Metzner, 1985; Braxton et al., 2004; Cabrera et al., 1992; Kuh et al., 2006; Berger & Milem, 1999; Pascarella & Terenzini, 1980; Tinto, 1975), highlights the importance of considering both pre-enrolment and post-enrolment factors in student success.

Considered individually, the variable that explained the largest amount of variance in academic success was self-concept. This variable is included in several of the models and theories that are discussed in the literature review (Berger & Milem, 1999; Cabrera et al., 1992; Jama et al., 2008; Kuh et al., 2006; Pascarella & Terenzini, 1980, Reason et al., 2005; Tinto, 1975), and was also included in the model of academic success set out specifically for this study. While Sanchez and Sanchez Roda (2003) pointed out that the relationship between academic self-concept and academic success is complex and that both of these constructs

could influence each other mutually, Basson (2006), Cokley (2000), Lemmens (2005), McCoach and Siegle (2003), Kornilova, Kornilov and Chumakova (2009) and Sikhwari (2014) stated that as much as a third of the variance in academic success can be explained by academic self-concept. On the other hand, some researchers could not find a significant relationship between academic self-concept and academic success (Awad, 2007; Freeman & Areepattamannil, 2008). However, the results of this study point towards the fact that academic self-concept is the best individual predictor of the academic success of the entire sample. It could be hypothesised that students with high levels of academic self-concepts previously had positive academic experiences, which could relate to higher levels of academic competency, readiness and skills (which could include language proficiency, time-management skills, motivation, and other skills) that are necessary for academic success.

The individual variables Age and Tuition in first language had relatively equal explanatory value. Although much less important than self-concept, their unique explanations of variance were still significant. Several theories and models (Braxton et al., 2004; El-Khawas, 2003; Glass & Harrington, 2002; Kuh et al., 2006; McCormick, 2011; Milem & Berger, 1997; Mlambo, 2011; Reason et al., 2005; Tinto, 1975) highlight the predictive value of students' age in their academic success. However, Bean and Metzner (1985) viewed students' age as so important that their theory specifically focussed on the differences between the success of traditional (younger than 23 years) versus non-traditional (23 years and older) students. Most researchers postulate that, although no significant differences exist in the academic abilities of traditional and non-traditional students, they would arrive at success in different ways because different factors are of greater importance for the two different groups. Moreover, because non-traditional students are more likely to have more responsibilities and roles to fulfil while studying, they might be more likely than traditional students to drop out of HE due to these challenges (McCormick, 2011; Rautopuro & Vaisanen, 2001; Ross-Gordon, 2011). Similar to these views, the predictive value of age in student success seems to be confirmed by the results of this study.

Because higher numbers of diverse students with different home languages enrol in HE annually, understanding the predictive value of students' language proficiency has become increasingly important internationally. In South Africa with its eleven official languages, the effect of language on success is of even higher importance (Keeve et al., 2012). Students' language proficiency has been included in many of the theories and models on student success that are discussed in previous chapters (Bourdieu, 1977, 1984; Boughey,

2002; Jama et al., 2008; Leibowitz, 2005). Moreover, a large number of studies have shown the effect of language proficiency on success. The CHE (2010), Gunning (2002), and Heugh (2000) showed that students who do not receive mother tongue education show significant backlogs and that the gap created by poor language proficiency is a significant contributor to students' failure in HE. These findings were true for international students, and students in SA (Anderson et al., 2004; Koch, 2007; Korobova, 2012; Louwrens, 2003; Makgalemele, 2005). Similar to these findings, this study shows that language proficiency remains an important predictor of academic success for the entire sample of participants.

6.3.2 Predictors of academic success for the designated and white groups. In this study, similar to the results pertaining to the entire sample, the complete set of variables and the separate sets of pre- and post-enrolment factors explained a significant amount of variance in students' academic success for both the designated and white groups. Thus, arguments regarding the importance of using multiple predictors of success and for including both pre- and post-enrolment factors were confirmed. However, the difference in the amount of variance in academic success that could be explained was noteworthy. The complete set of variables explained 88.2% of the variance in the academic success for the white group, but only 31.6% of the variance for the designated group. From this, it is clear that the variables utilised in the current study provided a better understanding of the academic success of white students, while variables beyond the scope of this study are involved in the academic success of the designated group. Thus, the prediction of academic success in designated groups seems to be intricate.

In terms of the individual variables that provided unique explanations for the variance in academic success, results differed for the two groups. Only one variable, academic self-concept, explained a significant amount of the variance for both groups (uniquely explained 5.7% for the designated group and 13.7% for the white group). Apart from academic self-concept, different predictors emerged for the two groups. For participants from the designated group, age (uniquely explained 2.6%), the type of high school attended (uniquely explained 2.4%), and commitment to the HE institution (uniquely explained 2.7%) provided unique explanations. A possible explanation for the importance of age for this group of students particularly, might be the history of racial segregation in SA. Mature (non-traditional) students from the designated race group were probably more exposed to the negative circumstances of segregation, with even less resources and educational opportunities than their younger counterparts. The second variable that was only significant in explaining the

academic success of the designated group and not the white group was the type of high school that participants attended. This finding correlates with several previous research studies that indicate the importance of previous academic experiences in the academic success of students in HE (Fakude, 2012; Jones et al., 2008; Kuh et al., 2006; Leibowitz et al., 2009; Tinto, 1975; Wilson-Strydom, 2010). Once again, it would seem that the troubled history of SA, at least in part, could offer some explanation for this finding. Stephen et al. (2004) indicated that white students were more likely to attend high schools of a high quality, while black students were more likely to attend disadvantaged high schools, leading to significantly lower levels of readiness for HE among black students. Moreover, this finding was confirmed earlier in this study when only students from the designated group reported to have attended non-fee-paying high schools. The last individual variable that was significant for the designated group alone was students' commitment to the HE institution. The effect of commitment to the HE institution in academic success has been found in several studies (Graham, 2007; Hirsch, 2001; Lotkowski et al., 2004; Tinto, 1975). However, the specific role of this variable in designated groups needs further investigation.

For participants from the white group, gender (uniquely explained 3.6%), language of tuition (uniquely explained 12.7%), and participation in extracurricular activities (uniquely explained 10.4%) proved to be significant. Leonard and Jiang (1999) were of the opinion that females work harder and have better study skills than males have, and that these aspects lead to better academic outcomes for females, if compared to their male counterparts. However, to explain the fact that gender was significant only for the white group and not the designated group, it could be hypothesised that, due to overall poorer socio-economic backgrounds, both genders from the designated group have similar struggles in terms of academic skills and competencies, with the role of gender being less important. Another variable that was found to be significant in the prediction of the academic success of white participants was receiving tuition in a first language. Similar to the other variables that were discussed previously, many studies point towards the negative effect of receiving tuition in a second or third language and that students who do not receive education in their mother tongue show significant backlogs (Anderson et al., 2004; CHE, 2010; Gunning, 2002; Heugh, 2000; Van Rooy & Coetzee-Van Rooy, 2015). This seems to be particularly true for the white participants of this study. It might be hypothesised that the white students probably received education in their mother tongue during high school and thus found the transition to tuition in a second language in HE particularly difficult. Students from designated groups, in contrast, have probably become

accustomed to tuition in a second or third language already during their high school years. The last variable that explained a significant amount of the variance in the academic success of the white group only was participation in extracurricular activities. The value of participation in extracurricular activities in academic success has been confirmed by a variety of studies (Inkelas et al., 2007; Kuh et al., 2006; Lehr et al., 2004; Pike & Kuh, 2005; Pascarella & Terenzini, 2005).

6.3.3 Predictors of academic success for the different year groups. In this study, the hypothesis that the predictive value of pre-enrolment factors will decrease, while the predictive value of post-enrolment factors will increase as students mature in their academic career, could not be confirmed. This is in contrast to specifically the models of Tinto (1975) and Jama et al. (2008), who proposed that several stages exist when examining students' progression through their HE careers. Both models propose that students will enter HE with different levels of readiness and different demographic attributes, but that through their interaction with the HE environment, would become more integrated with the HE system and would gain the skills and knowledge necessary for success in HE and beyond. Therefore, according to these models, it would be expected that different variables would be of greater importance for students in their first academic year as opposed to students in their final academic year in HE. These models could not be confirmed in this study. It may be hypothesised that certain aspects are hindering the expected progression of students as they proceed from one academic year to the next. The integration of students in this study with the HE context, as well as their development of academic and social skills, knowledge and competencies, might not be as good as would be expected. A possible explanation could be that students are significantly underprepared for the challenges of HE and that these backlogs are never fully conquered due to several factors mentioned (such as challenges with regard to academic preparedness, language proficiency, etc.).

In summary, upon examining the predictors of academic success, it is clear that, similar to previous research findings, the results of this study indicate the complexity of the prediction of academic success and that both pre- and post-enrolment factors are important in academic success, regardless of the race of students. However, the effect of the history of racial segregation in SA remains significant, and this could be seen when the individual predictors of academic success for the different race groups were examined. Finally, since no significant explanations for the variance in academic success across year groups were found, it became apparent that academic success (and progress) is still not understood completely.

6.4 Experiences with Regard to Academic Success

The qualitative results discussed in this section relate to the last (qualitative) research question regarding students' experiences of academic success and the factors associated with it.

Five main themes, with subthemes, emerged. These are now integrated and discussed by referring to the complexity of understanding academic success (including participants' perceptions of what constitutes academic success, academically successful students, and academically successful behaviour) and the aspects participants related to academic success (the factors participants perceived to affect academic success).

6.4.1 The complexity of academic success. Firstly, participants' definitions of academic success indicated the complexity of the construct, and they highlighted the fact that academic success cannot be defined simplistically. This is in accordance with most of the literature regarding student success that point out the complexity of academic success and also the fact that multiple definitions exist for academic success (Korobova & Starobin, 2015; Kuh et al., 2006; Mentz, 2012; Tinto, 1975; York et al., 2015). Furthermore, similar to other researchers who call attention to the holistic nature of academic success (Kuh et al., 2006; Mentz, 2012; Strauss & Volkwein, 2002; Weaver, 2011; York et al., 2015), students who participated in the qualitative section of the study highlighted both quantitative (focussed on specific marks/results) and qualitative (student satisfaction, resilience etc.) measures of academic success in their definitions of success. Lastly, researchers also highlight most of the aspects that participants included in their conceptualisations of academic success (e.g., obtaining distinctions, reaching academic goals, being satisfied with your own academic performance, and acquiring and applying new knowledge and skills) (Kuh et al., 2006; Mentz, 2012; Weaver, 2011; York et al., 2015).

With regard to the next theme that emerged, participants pointed out that successful students have high levels of motivation, a high academic self-concept, effective time-management skills, and are balanced and resilient. Previous research shows that these aspects are all significant in student success. Literature indicates that high levels of motivation will lead to positive academic behaviour and that positive academic behaviour, in turn, once again affects students' levels of motivation (Ajiboye & Tella, 2006; Bailey & Phillips, 2015; Kusrkar et al., 2012). Furthermore, academic self-concept has been indicated as an important contributor to students' academic success (Kobal & Musek, 2001; Lau & Chan, 2001; Michie

et al., 2001; Sikhwari, 2014; Trautwein et al., 2006; Yilmaz, 2014). Finally, previous research studies (Kuh et al., 2006; Roberts & McNeese, 2010; Strydom & Mentz, 2010; Trowler, 2010) also regard being balanced and having effective time-management skills as important in students' success. The views regarding an academically successful student resemble several of the post-enrolment factors that have been discussed previously.

Next, when investigating the specific behaviour that successful students would demonstrate, several associations could be made with existing literature on the topic. Firstly, several research studies (Alexander & Hicks, 2016; Kuh, 2003; Mentz, 2012; Nasrullah & Khan, 2015; Nonis & Hudson, 2006; Pickworth et al., 2005; Theron, 2015; Wilms, 2003) linked academic success with the time spent on academic activities (attending classes and spending adequate time on academic tasks) . Secondly, the ability to make use of effective study skills was also shown to be significant in students' success (Bean & Metzner, 1985; Kuh et al., 2006; Sahraee et al., 2015). Lastly, several researchers highlighted the importance of participation in extracurricular activities, especially for students who are at risk, because it connects students psychologically and socially to similar groups and also because students are able to engage in activities that develop skills and competencies that allow them to succeed in HE (Correa et al., 2015; Kuh et al., 2006; Pascarella et al., 2004; Pascarella & Terenzini, 2005; Pather & Chetty, 2015). Similar to the previous section, these student behaviours were also included in the post-enrolment factors that were highlighted earlier in this study.

6.4.2 Aspects related to academic success. Participants initially highlighted several demographic factors that they perceived as important in academic success, which included gender, age, and race. Although several researchers found that females are more successful than males in HE (Akgun & Ciarrochi, 2003; Al-Emadi, 2003; Baker, 2004; Chow, 2007; Linver et al., 2002), other studies point out that the effect of gender on success should be taken into account together with other variables (Fraser & Killen, 2003; Keeve et al., 2012; Pitoniak & Yeld, 2013; Sikhwari, 2007; Strydom & Mentz, 2010), which is in line with participants' view that gender does not determine academic success, but rather students' motivation and hard work. Next, participants had similar views to the CHE (2010), Fram et al., (2007), Ogbu (1986), Van Rooy and Coetzee-Van Rooy (2015), and Zirkel (2005) that racial differences in academic success could be the result of other factors, such as cultural and social identity, socio-economic aspects, lecturer's perceptions, and language proficiency. This is especially true in SA, with its history of racial segregation (Gbadamosi & De Jager, 2009; Steyn et al., 2014). Lastly, participants were of the opinion that age will not necessarily

determine academic success, but that having clear academic goals and being certain of what you want to achieve will determine success. Some participants stated that students who are more mature (regardless of age) would be more certain of their academic goals and work hard to achieve them. Several researchers also point out that, although different factors are at play in the academic success of students of different ages, no significant differences exist in the academic success of traditional and non-traditional students alike (Glass & Harrington, 2002; Graham & Gisi, 2000; Newman-Ford et al., 2009).

Next, participants included two other pre-enrolment factors in their discussions, namely the type of high school that students attended, and parental levels of education and the effect thereof on academic success. Similar to the majority of the literature on the type of high school students attended and their academic success in HE (Fakude, 2012; Kuh et al., 2006; Mentz, 2012; Pike & Saupe, 2002; Van Zyl, 2016), participants were also of the opinion that attending schools with adequate resources, teachers and curriculums of a high quality, rules and structures, and an ethos of striving for success would have a positive effect on students' success in HE. However, in contrast to the bulk of literature, some participants also stated that having attended a disadvantaged school could lead to higher levels of motivation among students because they view HE as an opportunity to rise above their previous circumstances, which could aid in student success. Participants had opposing views with regard to generational status. On the one hand, they stated that being a first-generation student could increase the pressure on students to perform well, because the hopes of everyone in the family are on them to be successful, but that it could also mean that family members will encourage and support them in their academic careers because they are the first to attend HE. On the other hand, in terms of being a continuous-generation student, it could mean a better understanding by family and other family members that attended HE before you regarding the challenges of HE, or pressure to perform. Most researchers focus on the negative effect of being a first-generation student and point out that first-generation students are less prepared for HE and are more likely to drop out than their continuous-generation peers are (Carlton, 2015; CHE, 2010; Legotlo et al., 2002; MacGregor, 2007; Pike & Kuh, 2005).

Participants highlighted various post-enrolment factors that they perceived as important in academic success. These included academic and non-academic interactions with staff and peers, external factors (employment responsibilities, financial responsibilities, and family responsibilities), and students' living arrangements. In terms of the effect of lecturers, participants indicated that lecturers who are willing to get to know their students have a

positive effect on students' motivation and their academic success. Conversely, lecturers who were perceived to be disinterested in their students, or lecturers who displayed favouritism, had a negative effect on students' motivation, class attendance, and academic success. Both of these points of view were indicated by previous research studies (Coetzee, 2011; DeFreitas & Bravo, 2012; Glass et al., 2015; Graunke & Woosley, 2005; Kim & Lundberg, 2015; Kuh & Hu, 2001; Reed, 2015; Siyengo, 2015; Thomas, 2012). Next, participants drew attention to both academic and non-academic interactions with peers in their discussions. In terms of academic contact with peers, participants stated that these interactions with peers with the same goals and ambitions would keep students motivated and hard working, but that it also would enable them to gain academic support from peers, both of which would contribute positively to academic success. These notions are confirmed by previous research (Falchikov, 2001; Strydom & Mentz, 2010; Strydom et al., 2010; Tran, 2014). Participants viewed non-academic interaction as helpful in managing the stress of being a student and also in providing periods of rest and relaxation between academic activities, all of which would have a positive effect on their motivation and success. Conversely, participants mentioned the fact that too much time spent on social interactions, especially with peers who are not motivated to perform academically, could be distracting and have a negative effect on the time spent on academic activities and, ultimately, academic success. Once again, literature in the field of non-academic peer interactions confirmed both these views (Antonio, 2004; Byl et al., 2016; Gibson, 2005; Krause, 2005; Leka, 2015; Lundberg, 2003; Milem et al., 2004; Pascarella & Terenzini, 2005; Rhodes & Nevill, 2004; Saunders, 2008). In terms of the external factors that were discussed, participants' views regarding part-time work while studying mostly resembled the views suggested in previous studies (Fakude, 2012; García-Vargas et al., 2016; Govender, 2013; Grabowski et al., 2016; Mentz, 2012; Scott-Clayton, 2012; Tinto, 1993). Firstly, participants stated that working part-time could take time away from academic activities, which could have a negative effect on academic success, but secondly, participants also noted that if the part-time work relates to their field of study, it could be beneficial in terms of acquiring new skills and knowledge. Thirdly, part-time work could also alleviate the financial stress with which some students have to cope, and in lowering the stress, contribute positively in terms of the ability to be successful. Similarly, resembling previous research on the topic (Bowen et al., 2009; Jones et al., 2008; Letseka et al., 2009; Van Zyl, 2016), participants indicated the negative effect that financial responsibilities and stress would have on student success. However, in contrast with previous research, participants in this study pointed out that financial responsibilities could have a positive effect on students' motivation

and persistence because students are aware of the sacrifices their families are making to keep them enrolled in HE. However, while most researchers focused on the negative effect of having family responsibilities on academic success (Alami, 2016; Jeffreys, 2012; Mdyogolo, 2012; Mooloo, 2014; Mudhovozi, 2014; Sy & Brittian, 2008), participants also highlighted that it could be a motivating factor to obtain a degree as soon as possible so that these family responsibilities could be met more successfully.

The last aspect discussed by participants in the qualitative section was the effect of living arrangements on academic success. Participants highlighted several benefits of living on campus, including the fact that resources are readily available, less time is spent on travelling to and from campus (leaving more time for academic activities), and lower levels of financial responsibilities. These aspects have been examined by previous research studies as well and have been found to contribute positively to success (DHET, 2011; Mbara & Celliers, 2013; Nel et al., 2009; Pike & Kuh, 2005). However, participants also highlighted two positive aspects of living off campus that have not been part of previous studies, namely the fact that students living off campus do not have to take part in compulsory student activities (leaving more time for studying), and that students living off campus would have to cope with real-life stressors (e.g., financial stress, commuting etc.) that will prepare them for life after HE.

In summary, the qualitative section of the study seems to confirm many of the quantitative results, especially regarding the complexity of academic success and some of the factors, such as age, gender, race, type of high school attended, parental levels of education, interactions with staff and peers, financial responsibilities, family responsibilities, and employment responsibilities, that would play a role in academic success.

6.5 Chapter Summary

This chapter scrutinised the results from the quantitative and qualitative sections of the study. Main results and findings from both these sections were discussed in relation to the research questions and with regard to previous studies in the field of students' academic success. In the next chapter an integrated view of the quantitative and qualitative results of this study is given, the limitations of this study are discussed, and recommendations for future research studies are made.

Chapter 7: Implications, Limitations and Conclusion

In this concluding chapter, a summary of the most significant findings of this research study is provided by means of an integrated discussion of the quantitative and qualitative findings. Subsequently, the limitations of the current study are presented and recommendations for future research studies in the field of academic success are made. Finally, the chapter concludes with closing thoughts regarding the research study.

7.1 Summary of Most Significant Findings of the Study – Quantitative and Qualitative Results Integrated

The general research objective of the study was to examine the factors that play a role in the academic success of students, and students' perceptions of their academic success and to expand on the model for academic success within the South African context, with a specific focus on non-traditional students. This study is at the meeting point between HE and psychology and aims to make a unique contribution to the understanding of students', especially non-traditional students' academic success in the SA context. The study was conducted over a one-year period at an HE institution in SA among first- to fifth-year students enrolled in the Faculty of the Humanities at the UFS. The integrated model of academic success formulated earlier in this study serves as the outline for the most significant findings that are discussed below. Furthermore, the manner in which the qualitative data supported, enriched or conflicted with the quantitative data will be noted in the paragraphs below.

Firstly, the integrated model of academic success that was set out for this study, makes it clear that several pre- and post-enrolment factors in interaction are important in the prediction of academic success. The results of this study show this explanation to be true, because both the quantitative and qualitative sections of the study indicate the complexity and multidimensionality of academic success. The quantitative section showed that the complete set of variables explains a significant amount of the variance in academic success for the entire sample, the designated group, and the white group. Similarly, participants of the qualitative section also stated that a variety of pre- and post-enrolment factors contribute to academic success. As shown in previous chapters, this is in keeping with most of the major findings regarding academic success (Astin, 1984; Bean & Metzner, 1985; Braxton et al., 2004; Cabrera et al., 1992; Kuh et al., 2006; Mentz, 2012; Milem and Berger, 1997; Pascarella & Terenzini, 1980; Reason et al., 2005; Spady, 1970; Strauss & Volkwein, 2002;

Strydom & Mentz, 2010; Tinto, 1975; Weaver, 2011; Wilson-Strydom, 2010; York et al., 2015).

Next, several differences between the white group and designated group emerged upon examining the effect of students' race on their academic success. Results of the quantitative section show that white students were more successful than students from other races were. However, participants from the qualitative section proposed that race as such should not be used to explain academic success, but rather that other factors such as cultural and social identity, socio-economic background, lecturer's perceptions, and language proficiency would play a role. Several researchers agree that these factors, rather than race as such, could account for the differences between race groups (CHE, 2010; Dixon & Durrheim, 2003; Fram et al., 2007; Ogbu, 1986; Van Rooy & Coetzee-Van Rooy, 2015; Zirkel, 2005). This notion also seems to be true for this study because students from the designated group were more likely to have attended impoverished schools, more likely to come from lower socio-economic backgrounds, more likely to be first-generation students, and more likely to receive tuition in a language other than their first language. Therefore, race could rather be viewed as a surrogate for several other variables (including cultural and background variables) than a predictor of academic success in itself. This and other studies indicate the negative effect of these factors on academic success (Brock, 2010; Fram et al., 2007). Additionally, except for students' academic self-concepts, different individual variables were significant in predicting the academic success of the two race groups. Age, the type of high school that students attended, and commitment to the HE institution were significant for the designated group, while gender, language of tuition, and participation in extracurricular activities were important in predicting the academic success of the white group. Moreover, although the complete set of variables explained a significant amount of the variance for both race groups, it explained 88.2% of the variance in the academic success of the white group and only 31.6% of the variance in the academic success of the designated group, which shows that we still have a poor understanding of factors that play a role in the academic success of students from race groups other than white and that more research needs to be conducted to find answers in this regard.

The integrated model of academic success that was set out for this study also proposed four stages of development that students would be expected to negotiate in their academic careers. It was thus expected that different variables would be important for first-year students who were only beginning their HE careers and fifth-year students who would be approaching

the end of theirs. However, this study did not yield any significant differences based on the different year groups, possibly because certain aspects are hindering the expected progression of students as they proceed from one academic year to the next. This aspect is also highlighted in the recommendations section of this chapter.

When the different stages of the integrated model of success were observed separately, interesting findings became apparent. Firstly, several significant findings emerged upon examination of the pre-enrolment stage of the integrated model of this study. Results from both the quantitative and qualitative sections of the study show that traditional students, students who received tuition in their first language, students who attended fee-paying schools, and continuous-generation students were more successful on an academic level, which are in accordance with several other studies (CHE, 2010; Fakude, 2012; Gunning, 2002; Heugh, 2000; Korobova, 2012; Kuh et al., 2007; Kwesiga, 2002; MacGregor, 2007; Newman-Ford et al., 2009; Pike & Saupe, 2002; Rouborn et al., 2015; Rautopuro & Vaisanen, 2001; Ross-Gordon, 2011; Van Zyl, 2016). However, participants in the qualitative section also proposed that attending a disadvantaged school and being a first-generation student could lead to higher levels of motivation among students, since attending HE could be seen as an opportunity to strive for a better life. Conversely, similar to other findings, the results (quantitative and qualitative) of this study found that other factors related to gender (e.g., motivation and effort), rather than gender as such, determine students' levels of success (Fraser & Killen, 2003, 2005; Keeve et al., 2012; Pitoniak & Yeld, 2013; Sikhwari, 2007; Strydom & Mentz, 2010). Therefore, it seems that all pre-enrolment factors set out in the model, except Grade 12 performance, played a role in students' academic success and in the prediction thereof. The fact that Grade 12 performance did not yield any results of statistical significance corresponds with the notions of Paras (2001), which indicated the limited predictive value of previous academic performance, especially when used with students from previously disadvantaged backgrounds. The fact that the biggest proportion of participants of this study was part of the designated group could point toward more disadvantaged backgrounds and would affect the predictive value of their Grade 12 performance negatively.

Secondly, students' commitment to the HE institution and their academic self-concepts were the only post-enrolment factors in the entry into HE stage of the model that yielded significant results. Students' commitment to the HE institution was significant in the prediction of the academic success of the designated group, possibly because students might see graduation from the institution as a means to improve their circumstances. These views

correspond with those of Graham (2007), Hirsch (2001), Lotkowski et al. (2004), and Tinto (1975). Moreover, participants' academic self-concepts yielded especially noteworthy results because it was the only variable that explained a significant amount of the variance in academic success for all three the groups (entire sample, designated group, and white group), and therefore is a significant predictor of academic success. Furthermore, participants in the qualitative section agreed with these findings and regarded academic self-concept as one of the aspects that define an academically successful student. These findings are in line with several other findings on the topic of academic success (Kobal & Musek, 2001; Lau & Chan, 2001; Michie et al., 2001; Sikhwari, 2014; Trautwein et al., 2006; Yilmaz, 2014), and it seems that students with high levels of academic self-concept will be more likely to perform better academically. This could be because, in order to have gained a better self-concept, students had to have had positive academic experiences, and in turn, to have had these positive experiences, they would have to possess the skills, knowledge, and competencies that would enable them to be successful. In addition, it seems that, regardless of race, if students have confidence in their academic abilities, they would work hard and do what is needed to achieve success, which in turn would affect their self-concepts positively. According to this study, academic self-concept could be regarded as the most significant predictor of academic success for all students, regardless of their race or year of study.

Lastly, a variety of post-enrolment factors that formed part of the HE experience stage was found to be significant in students' academic success. Results of both the quantitative and qualitative sections correlate with other studies in the field and indicate the statistical significance of academic and non-academic interactions between students and staff, and between students and their peers (Coetzee, 2011; DeFreitas & Bravo, 2012; Falchikov, 2001; Graunke & Woosley, 2005; Kim & Lundberg, 2015; Kuh & Hu, 2001; Strydom & Mentz, 2010; Strydom et al., 2010; Tran, 2014). Next, both sections of the study also indicated the importance of participation in extracurricular activities. This factor explained a significant amount of the variance in academic success for the white group in the quantitative section, and participants in the qualitative section highlighted this as part of what successful students would do, because it contributes to students' integration with the HE, which in turn affects student success. Therefore, this finding seems to confirm the importance of participation in extracurricular activities for student success, as shown by other studies as well (Correa et al., 2015; Kuh et al., 2006; Lumley et al., 2015; Pather & Chetty, 2015). Moreover, results of the quantitative section indicate that non-traditional students, students from the designated race

group, and students who did not receive tuition in their first language had higher levels of employment responsibilities, financial responsibilities, and family responsibilities, which could affect their academic success negatively. Furthermore, participants in the qualitative section of the study also indicated the negative effect of these aspects in academic success. Therefore, these findings seem to represent previous findings in the literature accurately (Fakude, 2012; Govender, 2013; McGhie, 2012; Mentz, 2012; Sadler & Erasmus, 2005; Statistics South Africa, 2014; Van Zyl, 2016; Walters & Koetsier, 2006). However, results from the qualitative study once again indicated students' abilities to thrive in adversity when it was pointed out that these stressors could also make students more determined and motivated to reach their academic goals because they viewed their HE careers as an opportunity to grow and move forward. However, the physical and psychological energy that students devoted to their academic careers, the degree for which students enrolled, time spent on academic activities and living on or off campus did not yield any significant results for this specific study, which is in accordance with studies by Areepattamannil and Freeman (2008), Crissman Ishler and Upcraft (2005), Salamonson et al. (2009), and Singh et al. (2002).

In summary, it would seem as if the factors that were set out in the integrated model of success were accurate to a large extent and that it is necessary to view the academic success of students as a complex process of interactions between various pre- and post-enrolment factors that in combination contribute to student success. Results seem to indicate that both pre- and post-enrolment variables are of equal importance and that no single variable in isolation can explain the full amount of variance of the academic success of students. However, the results of the study indicate the significance of students' academic self-concepts in their academic success. Lastly, results of this study also indicate the lingering effects of the history of racial segregation in SA and that more than 20 years after the eradication of the Apartheid regime, students from the designated group are still more likely to have more significant backlogs than their peers from the white group have. However, results from the qualitative study pointed towards students' dedication and determination in challenging circumstances, an aspect that enriched the quantitative results and pointed towards possible protecting factors and resilience among students.

The following section examines the limitations of the current study.

7.2 Limitations of this Study

In terms of sampling, a variety of limitations should be noted. A non-probability sample of a limited size was utilised in the quantitative section of the study, which could affect how well the sample represented the total population that was studied (Griesel, 2006). Moreover, the sample groups for both the quantitative and qualitative sections of the study were possibly not an accurate representation of the entire student population in the Faculty of the Humanities. For example, in terms of race and ethnicity, black students might have been overrepresented in the qualitative section of the study, while students from other race groups might have been underrepresented. Additionally, this study was conducted at a single institution, the University of the Free State and was limited to a single faculty at this institution, namely the Faculty of the Humanities. All these limitations in terms of sampling restrict the generalisability of the results.

Several limitations with regard to the data-collection methods that were utilised in the study came to the fore. Firstly, the use of self-report measures in the quantitative section of the study could lower the validity and reliability of the results. Social desirability (Dodorico McDonald, 2009; Van de Mortel, 2008) could have had an effect, as participants might have presented themselves more favourably. Furthermore, participants might have a skewed perception of their own abilities and actions. Another limitation pertaining to the survey is the considerable length of the survey, which could explain the low response rate of only 4.31%, resulting in sampling biases (Dillman, 2000; Nulty, 2008). The reliability of some of the subscales used (such as the *SASSE* and *School Achievement Motivation Rating Scale*) is questionable. In addition to this, items were missed in two of the scales that were utilised.

In terms of data-collection during the qualitative section of the study, focus group discussions are not always optimal because participants could have skewed their true understanding to present more favourably due to notions that their academic functioning was being evaluated (Berg, 2009). Therefore, participants might not have shared their true understanding of academic competence and the factors contributing to academic success, since they might have perceived this as discomforting or too personal. Lastly, all data were collected in English. This could have affected how the participants understood the questions in the survey, and their ability to express themselves during the focus groups discussions. Although care was taken to construct questions and discussions in such a way that they could

be understood and interpreted easily, language proficiency challenges among participants might still have affected the responses obtained in both sections of the study.

Next, since the aim of this study was to include a wide variety of variables, it was not possible to measure all the variables in depth. Owing to the breadth of focus, depth was compromised. For example, in terms of academic involvement, quantity (e.g., the number of hours spent on academic tasks) was measured, but the quality of these activities could not be ascertained. Furthermore, since only a few of the participants' NBT data could be obtained, a less rigorous alternative, namely tuition in first language, had to be used.

Lastly, in terms of the analysis of the quantitative data, MANOVAs and regression analysis were used. Although these statistical methods were satisfactory to answer the research questions of this study, statistical methods that are more sophisticated were not possible due to the small size of the quantitative sample. Moreover, owing to the limited sample size, some of the statistical models included small samples (e.g., the white group for MANOVA and regression analyses consisted of only 44 participants). Due to the small sample size, statistical significant findings may not represent factors worth pursuing by policy makers. Regarding the interpretation and analysis of the qualitative data, interviewer bias (the researcher's views, opinions, and knowledge of relevant literature) could have played a role (Bless et al., 2006). Lastly, the fact that member checking (respondent validation) was not utilised in this study could impact on the accuracy, validity and transferability of the qualitative data.

7.3 Recommendations for Future Studies

Recommendations for possible future research studies are made by considering the limitations discussed above, but also by considering aspects and areas that were beyond the scope of this study but could add valuable knowledge and information to the body of research on student success.

Considering the sampling limitations of the current study, future research should include more representative sampling. By utilising probability sampling and extending the sampling size, research results will be more generalisable. While this study was focussed on one faculty at one institution, comparative studies across institutions and faculties can yield interesting information regarding institutional culture and the unique nature of faculty-specific academic success. Since it became clear from the findings in this study that much less is

understood of the academic success of students from designated groups, future studies should consider a specific focus on diversity and the representation of various racial, ethnic, and cultural groups.

While this study was cross-sectional in nature, future longitudinal studies might yield information that is more specific regarding the progression of students from their first to fifth year. By tracking students over time, clearer information of their movement through the phases proposed in the integrated model of academic success will be obtained, with better explanations of the roles of pre- and post-enrolment factors in explaining students' success during their academic careers. Moreover, owing to the cross-sectional nature of this study, the last phase of the integrated model of academic success, namely students' ongoing integration (including academic factors like students' academic and intellectual development, and psychological factors like students' subsequent educational goals and commitment to the HE institution), was not included. Longitudinal studies will be able to include this phase.

Important constructs, such as socio-economic backgrounds upon entering HE and the true extent of language proficiency, were not captured in this study. Including these in future studies could shed more light on the complexity of academic success, especially in the South African situation. Moreover, it could be valuable to explore the specific strengths that students possess, especially students from disadvantaged backgrounds, so that these strengths could be developed to enhance their attempts at attaining academic success. Next, the quality of the SA school system and its effect on prospective students' readiness for HE could be explored, since it seems that many students are not prepared sufficiently for HE. Further exploration focussed on Bourdieu's (1984, 1986) notion of cultural capital and academic success might yield interesting findings, especially in the South African context. Additionally, since academic self-concept was shown to be the most significant individual predictor of academic success among students from all race groups, it is recommended that this construct and its effect on academic success be explored further. Lastly, this study has shown that there certain aspects may hinder the expected progression of students as they proceed from one academic year to the next and that the development of skills and knowledge are not as would be expected. This finding warrants more research.

While the focus of this study was on the individual, it might be insightful to also include institutional factors (e.g., resources and support services available so students) in future studies. Lastly, the inclusion of lecturers' perceptions of their students' academic

success and factors that influence their success, may add another perspective to the understanding of students' academic success.

Some implications of the study at an institutional and/or national level could include revising the current admission requirement for students to include other aspects in combination with prospective students' grade 12 marks. Furthermore, from the results of the study it became clear that the skills, knowledge and competencies that students with high academic self-concepts possess, are of utmost importance in their academic success. Therefore, it could benefit students to have support services and development programmes available in order for these skills to be expanded and enhanced (especially in the case of students that attended impoverished schools where these skills might be lacking). Lastly, although controversial, this study once again highlighted the importance of tuition in a first language and the student success dilemma might benefit from revision of current language policies at schools and HE institutions.

7.4 Conclusion

Understanding the academic success of students in HE in SA is essential to the ultimate success of individuals, HE institutions and the SA society at large (CHE, 2016; Young, 2016). Moreover, HE institutions are under pressure to ensure the success of their students, while student bodies in SA continue to grow and diversify (DHET 2014a; Mentz, 2012). However, current findings show that this ideal has not been achieved, and great numbers of students continue to drop out from HE every year (DHET, 2014b; DOE, 2008). To address this alarming trend, it is required to research and understand the factors that predict success and aspects that are related to academic success, especially in the SA context where relatively little research on student success has been conducted (CHE, 2016; Mentz, 2012; Van Dyk & Weideman, 2004). The following excerpt from the CHE (2013) adequately summarises the current situation in HE in SA:

South Africa has a pressing need for more graduates of good quality, to take forward all forms of social and economic development. It also needs more graduates to build up the education system itself by providing a strong new generation of teachers, college lecturers, academics and education leaders. However, South Africa's graduate output has been found to have major shortcomings in terms of overall numbers, equity, and the proportion of the student body that succeeds. (CHE, 2013, p. 15).

Within this context, the current study examined the pre-and post-enrolment factors that are important in the academic success of students enrolled in HE in SA. This study makes a unique contribution to the understanding of academic success among students in SA by including a wide variety of pre- and post-enrolment factors, but also by considering both quantitative and qualitative results and perspectives. This study examined four research questions, all of which have been discussed comprehensively in this study. Based on the findings of this study, it can be concluded that the prediction of academic success remains complex and that several variables in combination contribute to students' success. Moreover, results clearly indicate that both pre- and post-enrolment factors are very important in the academic success of students of all race groups. Yet, academic self-concept was shown to be the single most significant variable for students from all race groups and ages.

However, this study also shows that different variables in interaction play a role for students of different race groups. In addition, variables examined in this study were more successful in predicting the academic success of students from the white group than of students from the designated group. This indicates the poor understanding that still exists in terms of the academic success of diverse groups of students and indicates the continued effect of the history of SA, which was fraught with racial inequalities and segregation. Lastly, no significant differences were found between the different year groups, and it is clear from the results that students do not seem to progress and develop throughout their academic careers as expected, and that researchers and stakeholders still do not have a satisfactory understanding of all the aspects and factors that affect students' success.

References

- Abbott, M. L., & Joireman, J. (2001). *The relationship among achievement, low income and ethnicity across six groups of Washington State students*. (Technical report No. 1). Seattle Pacific University: Washington School Research Center, Lynnwood, WA.
- Abdullah, M. C., Teoh, H. C., Samsilah, R., & Jegak, U. (2015). Student engagement: Concepts, development and application in Malaysian universities. *Journal of Educational and Social Research*, 5(2), 275-284. doi:10.5901/jesr.2015.v5n2p275.
- Adams, J., & Corbett, A. (2010). Experiences of traditional and non-traditional college students. A quantitative study of experiences, motivations and expectations among undergraduate students. *Sociological Perspectives*, 15. Retrieved from http://cola.unh.edu/sites/cola.unh.edu/files/student-journals/JenniferAdams_AlexiaCorbett.pdf
- Adelman, C. (2006). *The toolbox revisited: Paths to degree completion from high school to college*. Washington, DC: US Department of Education.
- Afzal, H., Ali, I., Khan, M. A., & Hamid, K. (2010). A study of university students' motivation and its relationship with their academic performance. *International Journal of Business and Management*, 5(4), 80-88. doi:<http://dx.doi.org/10.5539/ijbm.v5n4p80>.
- Agar, D. L. (1990). Non-traditional students: Perceptions of problems which influence academic success. *Higher Education*, 19(4), 435-454. doi:10.1007/BF00137007
- Ahmad, I., & Said, H. (2016). Application of Astin's theory of students' involvement in service learning at higher education. *Man in India*, 96(1), 231-245. Retrieved from <https://pure.utm.my/en/publications/application-of-astins-theory-of-students-involvement-in-service-l>
- Ahmed, W., & Bruinsma, M. (2006). A structural model of self-concept, autonomous motivation and academic performance in a cross-cultural perspective. *Electronic Journal of research in Educational Psychology*, 10(4), 551-572. Retrieved from <http://eric.ed.gov/?id=EJ804122>

- Ajiboye, J. O., & Tella, A. (2006). Class attendance and gender effects on undergraduate students' achievement in a social studies course in Botswana. *Essays in Education, 18*, 1-14. Retrieved from <http://www.usca.edu/essays/vol182006/ajiboye%20revised.pdf>
- Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behavior*. Upper-Saddler River, NJ: Prentice-Hall.
- Akey, T. M. (2006). *School context, student attitudes and behaviour and academic achievement: An exploratory analysis*. New York, NY: MDRC.
- Akgun, S., & Ciarrochi, J. (2003). Learned resourcefulness moderates the relationship between academic stress and academic performance. *Educational Psychology, 23*(3), 287-294. doi:10.1080/0144341032000060129
- Alami, M. (2016). Causes of Poor Academic Performance among Omani Students. *International Journal of Social Science Research, 4*(1). 126-136. doi:10.5296/ijssr.v4i1.8948
- Alderman, R. V. (2008). *Faculty and student out-of-classroom interaction: Student perceptions of quality of interaction* (Unpublished doctoral dissertation). Texas, TX: Texas A&M University.
- Al-Dossary, S.A. (2008). *A study of the factors influencing student retention at King Saud University, Saudi Arabia: Structural equation modelling and qualitative methods* (Unpublished doctoral dissertation). Stirling, UK: University of Stirling.
- Al-Emadi, A. (2003). Gender, stream, achievement goals, locus of control strategies and academic achievement of Emirati college students. *Journal of Humanities and Social Sciences, 19*(1), 15-41. Retrieved from http://www.chss.uaeu.ac.ae/en/research/chss_journal/issues/vol19_en_2002_2003.pdf.
- Alexander, V., & Hicks, R. E. (2016). Does class attendance predict academic performance in first year psychology tutorials? *International Journal of Psychological Studies; 8*(1), 28-32. doi:<http://dx.doi.org/10.5539/ijps.v8n1p28>

- Aljohani, O. (2016). A Comprehensive Review of the Major Studies and Theoretical Models of Student Retention in Higher Education. *Higher Education Studies*; 6(2), 1-18. doi:10.5539/hes.v6n2p1
- Allan, A. (2008). *Law and ethics in psychology: An international perspective*. Somerset West, South Africa: Inter-Ed.
- Allik, J., Laidra, K., Realo, A., & Pullmann, H. (2004). Personality development from 12 to 18 years of age: Changes in mean levels and structures of traits. *European Journal of Personality*, 18(6), 445-462. doi:10.1002/per.524
- Altbach, P., Reisberg, L., & Rumbley, L. (2009). *Trends in global higher education: Tracking an academic revolution*. Retrieved from UNESCO website: <http://unesdoc.unesco.org/images/0018/001831/183168e.pdf>
- Altun, S. (2015). The effect of cooperative learning on students' achievement and views on the Science and Technology Course. *International Electronic Journal of Elementary Education*, 7(3), 451-468. Retrieved from <http://files.eric.ed.gov/fulltext/EJ1068065.pdf>
- Amelink, C. T. (2005). *Predicting academic success among first-year, first generation students* (Unpublished doctoral dissertation). Blacksburg, VA: Virginia Polytechnic Institute and State University.
- American Federation of Teachers, Higher Education. (2011). *Executive Summary on Student Success in Higher Education*. Retrieved from <http://www.aft.org/sites/default/files/studentssuccess0311.pdf>
- Anaya, G., & Cole, D. G. (2001). Latina/o student achievement: Exploring the influence of student-faculty interactions on college grades. *Journal of College Student Development*, 42(1), 3-14. Retrieved from <http://jhh.sagepub.com/content/14/3/256.refs>
- Andemariam, K., Tsegai, S., Andre, R., Dhumal, P., & Tessema, M. (2015). Work participation and academic achievement: Theoretical and practical implications. *European Journal of Business and Social Sciences*, 3(11), 15-32. Retrieved from <http://www.ejbss.com/Data/Sites/1/vol3no11february2015/ejbss-1516-15-workparticipationandacademicachievement.pdf>

Anderson, P., Reberger, H., & Doube, L. (2004). *Language proficiency and academic outcomes for international postgraduate students at the University of Adelaide*. (Report for Executive Director: Student and Staff services). Adelaide, Australia: University of Adelaide.

Animasahun, R. A. (2010). Development and validation of academic-success barrier battery. *Educational Research*, 1(10), 520-534. Retrieved from <http://www.interestjournals.org/ER>

Antonio, A. L. (2004). The influence of friendship groups on intellectual self-confidence and educational aspirations in college. *Journal of Higher Education*, 75(4), 446–471 doi:10.1353/jhe.2004.0019

Archibald, J. (1997). Second language acquisition. In W. O'Grady, M. Dobrovolsky, & F. Katamba (Eds.), *Contemporary Linguistics: An introduction* (pp. 503-537). London, United Kingdom: Longman.

Areepattamannil, S., & Freeman, J. G. (2008). Academic achievement, academic self-concept and academic motivation of immigrant adolescents in the Greater Toronto area secondary schools. *Journal of Advanced Academics*, 19(4), 700-743. doi:10.4219/jaa-2008-831

Asrat, D. (2007, May). *First-generation student engagement in effective educational practices at a four-year public university*. Presented at the 47th annual forum of the Association of Institutional Research, Kansas City, Missouri. Abstract retrieved from <http://scholar.ufs.ac.za:8080/xmlui/bitstream/handle/11660/2173/MentzM.pdf?sequence=1&isAllowed=y>

Astin, A. W. (1975). *Preventing students from dropping out*. San Francisco, CA: Jossey-Bass.

Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Personnel*, 25(4), 518-529 Retrieved from www.ydae.purdue.edu/lct/hbcu/documents/Student_Involvement_A_Developmental_Theory_for_HE_Astin.pdf

Astin, A. W. (1993). *What matters in college? Four critical years revisited*. San Francisco, CA: Jossey-Bass.

- Astin, A. W. (1999). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 40(5), 519-529. Retrieved from https://www.researchgate.net/publication/220017441_Student_Involvement_A_Development_Theory_for_Higher_Education
- Attride-Stirling, J. (2001). Thematic networks: An analytic tool for qualitative research. *Qualitative Research*, 1(3), 385-405, doi:10.1177/146879410100100307
- Awad, G. H. (2007). The role of racial identity, self-concept and self-esteem in the prediction of academic outcomes for African American students. *Journal of Black Psychology*, 33(2), 188-207. doi:10.1177/0095798407299513
- Awan, R. U. N., Noureen, I., & Naz, A. (2011). A study of the relationship between achievement motivation, self-concept and achievement in English and Mathematics at secondary level. *International Educational Studies*, 4(3), 72-79. doi:10.5539/ies.v4n3p72
- Ayliff, D. (2010). 'Why can't Johnny write? He *sounds* okay!' Attending to form in English second language teaching. *Perspectives in Education*, 28(2), 1-8. Retrieved from <http://scholar.ufs.ac.za:8080/xmlui/handle/11660/3633>
- Baban, A. (2008). Reconceptualization of the division between quantitative and qualitative research methods. *Romanian Association for Cognitive Science*, 12(4), 337-343. Retrieved from <http://www.ascrd.ro/images/attach/02%20Editorial%20BABAN%202.pdf>
- Babbie, E., & Mouton, J. (2006). *The practice of social research*. Cape Town, South Africa: Cape Town University Press.
- Baber, L. D., Castro, E. L., & Bragg, D. D. (2010). *Measuring success: David Coley's College Readiness Framework and the Illinois College and Career Readiness Act*. Champaign, IL: Office of Community College Research and Leadership, University of Illinois at Urbana-Champaign.
- Bachman, L. (1990). *Fundamental considerations in language testing*. Oxford, United Kingdom: Oxford University Press.

- Badat, S. (2007, June). *Higher education transformation in South Africa post 1994. Towards a critical assessment*. Paper presented at the Solomon Mahlangu Education Lecture, Constitution Hill. Abstract retrieved from http://www.cepd.org.za/files/CEPD_SolomonMahlanguLecture1_badat_2007.pdf
- Badat, S. (2016). *Deciphering the meanings, and explaining the South African higher education student protests 2015-16*. Retrieved from <http://wiser.wits.ac.za/system/files/documents/Saleem%20Badat%20-%20Deciphering%20the%20Meanings,%20and%20Explaining%20the%20South%20African%20Higher%20Education%20Student%20Protests.pdf>.
- Bahr, P. R., Toth, C., Thirolf, K., & Massé, J. C. (2013). A review and critique of the literature on community college students' transition processes outcomes in four-year institutions. In M. B. Paulsen (Ed.), *Higher Education: Handbook of Theory and Research Vol. 28* (pp. 459-511). Iowa City, IA: Springer.
- Bailey, T. H., & Phillips, L. J. (2015). The influence of motivation and adaptation on students' subjective well-being, meaning in life and academic performance. *Higher Education Research & Development, 35*(1), 1-16 doi:10.1080/07294360.2015.1087474
- Bailey, T. R., Leinbach, T., & Jenkins, D. (2006). *Is student success labelled institutional failure? Student goals and graduation rates in the accountability debate at community colleges*. New York, NY: Columbia University, Community College Research Centre
- Baker, S. R. (2004). Intrinsic, extrinsic, and motivational orientations: Their role in university adjustment, stress, well-being, and subsequent academic performance. *Current Psychology, 23*(3), 189-202. doi:10.1007/s12144-004-1019-9
- Bandura, A. (1997). *Self-efficacy: The exercise of control*. New York, NY: W. H. Freeman & Co.
- Bandura, A., Barbaranelli, C., Caprara, G. V., & Pastorelli, C. (1996). Multifaceted impact of self-efficacy beliefs on academic functioning. *Child development, 67*(3), 1206-1222. doi:10.2307/1131888
- Barbatis, P. (2010). Underprepared, ethnically diverse community college students: Factors contributing to persistence. *Journal of Developmental Education, 33*(3), 14-24.

Retrieved from http://evergreen.edu/washingtoncenter/resources/Underprepared,%20Ethnically,%20Diverse%20Community%20College%20Students%20Factors%20Contributing%20to%20Persistence_Optimized%20for%20Web%20Only.pdf

Barker, K. L., Dowson, M., & McNery, D. M. (2005). *Effects between motivational goals, academic self-concept and academic achievement: What is the causal ordering?* Paper presented at the Australian Association of Educational Research (AARE), Sydney, Australia. Abstract retrieved from www.aare.edu.au/05pap/bar05373.pdf

Bar-Tal, D., & Bar-Zohar, Y. (1977). The relationship between perception of locus of control and academic achievement: Review and some educational implications. *Contemporary Educational Psychology*, 2(2), 181-199. doi:10.1016/0361-476X(77)90020-0

Basit, T. N. (2013). Ethics, reflexivity and access in educational research: issues in intergenerational investigation. *Research Papers in Education*, 28(4), 506-517. doi:10.1080/02671522.2012.689318

Basson, D. (2006). *Die verwantskap tussen enkele veranderlikes en akademiese sukses op universiteit* (Unpublished master's thesis). University of Stellenbosch, Stellenbosch, South Africa.

Bean, J. P. (1983). The application of a model of turnover in work organizations to the student attrition process. *Review of Higher Education*, 6(2), 129-148. Retrieved from <http://search.proquest.com/openview/a822b90380355ab933d0a61fd99b9b6c/1?pq-origsite=scholar>

Bean, J., & Eaton, S. B. (2001-2002). The psychology underlying successful retention practices. *Journal of College Student Retention: Research, Theory and Practice*, 3(1), 73-89. doi:10.2190/6R55-4B30-28XG-L8U0

Bean, J. P., & Metzner, B. S. (1985). A conceptual model of nontraditional undergraduate student attrition. *Review of Educational Research*, 55(4), 485-540. doi:10.3102/00346543055004485

Behr, A. L. (1985). The senior certificate as predictor of academic success. *South African Journal of Education*, 5(3), 107-112.

- Bennett, D., McCarty, C., Carter, S. (2015). The impact of financial stress on academic performance in college economics courses. *Academy of Educational Leadership Journal*, 19(3), 25-30. Retrieved from <https://www.questia.com/library/journal/1P3-3966657951/the-impact-of-financial-stress-on-academic-performance>
- Berg, B. L. (2009). *Qualitative research methods for the social sciences* (7th ed.). Harlow, United Kingdom: Pearson.
- Berge, Z. L., Huang, Y. P. (2004). A model of sustainable student retention: A holistic perspective on the student dropout problem with special attention to e-learning. *Deosnews*, 13(5), 1-26. Retrieved from <http://library.oum.edu.my/oumlib/content/e-learning-resources/zane-1-berge/326127>
- Berger, J. B., & Milem, J. F. (1999). The role of student involvement and perceptions of integration in a causal model of student persistence. *Research in Higher Education*, 40(6), 641-664. Retrieved from <http://www.jstor.org/stable/40196897>
- Bitzer, E. (2009). *Higher Education in South Africa. A scholarly look behind the scenes*. Stellenbosch, South Africa: Sun Media.
- Bitzer, E., & Troskie-De Bruin, C. (2004). The effect of factors related to prior schooling on student persistence in higher education. *South African Journal of Education*, 24(2) 119-125. Retrieved from <http://academic.sun.ac.za/chae/bitzer/SAJE.2004.Factors%20related%20to%20prior%20schooling.pdf>
- Bless, C., Higson-Smith, C., & Kagee, A. (2006). *Fundamentals of social research methods: An African perspective* (4th ed.). Cape Town, South Africa: Juta and Company, Ltd.
- Bloom, B., Englehart, M., Furst, E., Hill, W., & Krathwohl, D. (1956). *Taxonomy of educational perspectives: The classification of educational goals. Handbook I: Cognitive domain*. New York, NY: Longmans, Green.
- Boakye, N. A. N. Y. (2015). The relationship between self-efficacy and reading proficiency of first-year students: An exploratory study. *Reading & Writing*, 6(1), 9. doi:10.4102/rw.v6i1.52

Factors and experiences related to academic success

- Bojuwoye, O. (2002). Stressful experiences of first year students of selected universities in South Africa. *Counselling Psychology Quarterly*, 15(3), 277-290
doi:10.1080/09515070210143480
- Bong, M., & Skaalvik, E. M. (2003). Academic self-concept and self-efficacy: How different are they really? *Education Psychology Review*, 15(1), 1-40.
doi:10.1023/A:1021302408382
- Bonney, B., Sam, L., Laryea, P. (2016). Stress and depression: The voice of undergraduate students of the University of Education, Winneba. *Journal of Advances in Social Science-Humanities*, 2(4) 1-6. doi:http://dx.doi.org/10.15520/2442
- Bontrager, R. N. (2015). *Community College Students' Academic success and persistence in math courses after developmental math: A case study* (Unpublished doctoral dissertation). Liberty University, Lynchburg, VA.
- Borrego, M., Douglas, E. P., & Amelink, C. T. (2009). Quantitative, qualitative, and mixed research methods in engineering education. *Journal of Engineering Education*, 53(1), 53-66. doi:10.1080/03043791003703177
- Botha, F., Snowball, J., De Klerk, V., & Radloff, S. (2013). Determinants of student satisfaction with campus residence life at a South African university. *ERSA Working paper 388, 7* Retrieved from <http://www.econrsa.org/publications/working-papers/determinants-student-satisfaction-campus-residence-life-south-african>
- Botha, H. L., Brand, H. J., Cilliers, C. D., Davidow, A., De Jager, A. C., & Smith, D. (2005). Student counseling and development services in higher education institutions in South Africa. *South African Journal of Higher Education*, 19(1), 73-88. Retrieved from http://reference.sabinet.co.za/webx/access.journal_archive/10113487/2005.pdf.
- Botha, H. L., & Du Plessis, S. A. (2007). An investigation of self-appraised cognition versus measured cognition. *South African Journal of Higher Education*, 21(4), 608-627. doi:http://dx.doi.org/10.4314/sajhe.v21i4.25685
- Boughey, C. (2002). Naming' students' problems: An analysis of language-related discourses at a South African university. *Teaching in Higher Education*, 7(3), 295-307. doi:http://dx.doi.org/10.1080/13562510220144798

- Boughey, C. (2004). Higher education in South Africa: Context, mission and legislation. In S. Gravett & H. Geysler (Eds.), *Teaching and learning in higher education* (pp. 1-21). Pretoria, South Africa: Van Schaik.
- Bourdieu, P. (1977). Cultural reproduction and social reproduction. In J. Karabel & A. H. Halsey (Eds.), *Power and Ideology in Education* (pp. 487-581). New York, NY: Oxford University Press.
- Bourdieu, P. (1984). *Distinction: A social critique of the judgement of taste*. Cambridge, MA: Harvard University Press.
- Bourdieu, P. (1986). The forms of capital. In J. G. Richardson (Ed.), *Handbook of theory and research for the sociology of education* (pp. 241-258). New York, NY: Greenwood Press.
- Bowen, W., Chingos, M., & McPherson, M. (2009). *Crossing the finish line: Completing college at America's public universities*. Princeton, NJ: Princeton University Press.
- Boyatzis, R. (1998). *Transforming qualitative information: Thematic analysis and code development*. Thousand Oaks, CA: Sage.
- Brannen, J. (2005). Mixing methods: The entry of qualitative and quantitative approaches into the research process. *The International Journal of Social Research Methodology, Special Issue*, 8(3), 173-185. doi:10.1080/13645570500154642
- Braskamp, L. A., Trautvetter, L. C., & Ward, K. (2006). *Putting students first: How colleges develop students purposefully*. Anker, MA: Anker Press.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in Psychology. *Qualitative Research in Psychology*, 3(2), 77-101. doi:10.1191/1478088706qp063oa
- Braxton, J. M., & Lee, S. D. (2005). Toward reliable knowledge about college student departure. In A. Seidman (Ed.), *College student retention: Formula for student success*. Westport, CT: Praeger.
- Braxton, J. M., & Lien, L. A. (2000). The viability of academic integration as central construct in Tinto's interactionist theory of college student departure. In J. M. Braxton

Factors and experiences related to academic success

- (Ed.), *Reworking the Student Departure Puzzle* (pp. 11-28). Nashville, TN: Vanderbilt University press.
- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2004). Understanding and reducing college student departure. *ASHE-ERIC Higher Education report*, 30(3). United States; Wiley.
- Braxton, J. M., Sullivan, A. S., & Johnson, R. T. (1997). Appraising Tinto's theory of college student departure. In J. C. Smart (Ed.), *Higher education: Handbook of theory and research Vol. 12* (pp. 107-158). New York, NY: Agathon.
- Braxton, J. M. (2003). Student success. In S. R. Komives & D. B. Woodard (Eds.), *Student Services: A handbook for the profession* (4th ed.) (pp. 317-338). San Francisco, CA: Jossey-Bass.
- Breier, M. (2010). From "financial considerations" to "poverty": Towards a reconceptualization of the role of finances in higher education student dropout. *Higher Education*, 60(6), 657-670. doi:10.1007/s10734-010-9343-5
- Britt, S. L., Canale, A., Fernatt, F., Stutz, K., & Tibbetts, R. (2015). Financial stress and financial counseling: Helping college students. *Journal of Financial Counseling and Planning Volume 26*(2), 172-186. Retrieved from http://afcpe.org/assets/pdf/volume_26_2/pages_172-186.pdf
- Brock, T. (2010). Young adults and higher education: Barriers and breakthroughs to success. *The Future of Our Children*, 20(1), 109-132 Retrieved from http://www.princeton.edu/futureofchildren/publications/docs/20_01_06.pdf
- Broder, S. J., & Farley, F. (2007). Predictors of college students' achievements. *Academic Exchange Quarterly*, 11(2), 225-229. Retrieved from <http://www.thefreelibrary.com/Predictors+of+college+student+achievement.-a0172686691>
- Brooks, G., & Adams, M. (2002). *Spoken English proficiency and academic performance: Is there a relationship and if so, how do we teach?* Paper presented at Celebrating teaching at Macquarie, Sydney, Australia. Retrieved from <http://www.cfl.mq.edu.au/celebrate/pdf/papers/brooks1.pdf>

- Brown, S. D., Tramayne, S., Hoxha, D., Telander, K., Fan, X., Lent, R. W. (2008). Social cognitive predictors of college students' academic performance and persistence: A meta-analytic path analysis. *Journal of Vocational Behavior* 72(3), 298-308 doi:10.1016/j.jvb.2007.09.003
- Brunsdn, V., Davies, M., Shevlin, M., & Bracken, M. (2000). Why do HE students drop out? A test of Tinto's model. *Journal of Further and Higher Education* 24(3), 301-310. doi:10.1080/030987700750022244
- Bryman, A. (2012). *Social research methods* (4th ed.). Oxford University, Oxford: United Kingdom.
- Buchler, M., Castle, J., Osman, R., & Walters, S. (2006). *Equity, access and success: Adult learners in public higher education*. Pretoria, South Africa: Council for Higher Education.
- Bunting, I., & Cloete, N. (2004). *Developing performance indicators for higher education: A South African Case study*. (CHET report). Retrieved from Centre for Higher Education Transformation website: www.chet.org.za
- Burley, H., Butner, B., & Cejda, B. (2001). Dropout and stop out patterns among developmental education students in Texas community colleges. *Community College Journal of Research and Practice*, 25(10), 767-782. doi:<http://dx.doi.org/10.1080/106689201753235903>
- Burns, N., & Grove, S. K. (2004). *The practice of nursing research: Conduct, critique and utilization* (5th ed.). St. Louis, MO: Elsevier.
- Byl, E., Struyven, K., Meurs, P., Abelshausen, B., Vanwing, T., Engels, N., & Lombaerts K. (2016). The value of peer learning for first-year postgraduate university students' social and academic integration. *Procedia – Social and Behavioral Sciences*. 228, 299-304. doi:<http://dx.doi.org/10.1016/j.sbspro.2016.07.044>
- Byrne, B. M. (2002). Validating the measurement and structure of self-concept. Snapshots of past, present and future research. *American Psychologist*, 57(11), 897-909. doi:10.1037/0003-066X.57.11.897

Factors and experiences related to academic success

- Cabrera, A. F., Castaneda, M. B., Nora, A., & Hengstler, D. (1992). The convergence between two theories of college persistence. *Journal of Higher Education*, 63(2), 143-164. Retrieved from <http://www.jstor.org/discover/10.2307/1982157?uid=2129&uid=2&uid=70&uid=4&sid=21101770295191>
- Carey, K. (2008). *Graduation Rate Watch: Making Minority Student Success a Priority*. Washington DC: Education Sector. Retrieved from http://www.educationsector.org/usr_doc/Graduation_Rate_Watch.pdf
- Carini, R. M., Kuh, G. D., & Klein, S. P. (2006). Student engagement and student learning: Testing the linkages. *Research in Higher Education*, 47(1), 1-32. doi:10.1007/s111620058150-9
- Carlton, M. T. (2015). First generation students and post-undergraduate aspirations. *SAGE Open October-December*, 1-8. doi:10.1177/2158244015618433
- Carnevale, A. P., & Fry, R. A. (2000). *Crossing the great divide: Can we achieve equity when generation Y goes to college?* Princeton, NJ: Educational Testing Service.
- Castro-Salazar, R., & Bagley, C. (2010). 'Ni De Aqui Ni from There'. Navigating between contexts: Counter narratives of undocumented Mexican students in the United States. *Race, Ethnicity and Education*, 13(1), 23-40. doi:10.1080/13613320903549651
- Charlton, B., & Andras, P. (2003). What is management and what does managers do? A systems theory account. *Philosophy of Management*, 3(3), 1-15. Retrieved from <https://www.hedweb.com/bgcharlton/rip-management.html>
- Cheek, J., Onslow, M., & Cream, A. (2004). Beyond the divide: Comparing and contrasting aspects of qualitative and quantitative research approaches. *Advances in Speech-Language Pathology*, 6(3), 147-152. doi:org/10.1080/14417040412331282995
- Chemers, M. M., Hu, L., & Garcia, B. F. (2001). Academic self-efficacy and first year college student performance and adjustment. *Journal of Educational Psychology*, 93(1). doi:10.1037/0022-0663.93.1.55

Factors and experiences related to academic success

- Chi, X., Liu, J., & Bai, Y. (2016). College environment, student involvement, and intellectual development: Evidence in China. *Higher Education*, 1-19. doi:10.1007/s10734-016-0030-z
- Chipunza, C., & Masiza, N. (2004). An exploratory study of perceptions of goal setting support among students at a tertiary institution. *SA Journal of Industrial Psychology*, 30(3), 82-86. doi:10.41022/sajip.v30i3.158
- Chiu, L. H. (1997). Development and validation of the School Achievement Motivation Rating Scale. *Educational and Psychological Measurement*, 57(2), 292-305. doi:10.1177/0013164497057002008
- Chou, C. M., & Shen, C. H. (2012). Factors influencing employability self-efficacy of engineering students in Taiwan. *International Journal of Engineering Practical Research*, 1(1), 10-14. Retrieved from https://archive.org/stream/IJEPR019/IJEPR019_djvu.txt
- Chow, H. P. H. (2007). Psychological well-being and scholastic achievement among university students in a Canadian Prairie city. *Social Psychology of Education*, 10(4), 483-493. doi:10.1007/s11218-007-9026-y
- Choy, S. (2004). *Paying for college: Changes between 1990 and 2000 for full-time dependent undergraduates: Findings from the condition of education 2004 (NCES 2004-075)*. Washington, DC: US Department of Education, National Center for Education Statistics.
- Chung, C. J. (2004). *The impact of attendance, instructor contact, and homework completion on achievement in a developmental logic course*. Retrieved from <http://findarticles.co./p/articles>
- Clift, P. (2003). *Student support and retention: Models of explanation and good practice*. Retrieved from University of Manchester, UMIST website: <http://documents.manchester.ac.uk/display.aspx?DocID10064>
- Cloete, H. (2001). *Oorsake van leermislukking in die Junior Primêre Fase van skole in die Windhoek stadsgebied* (Unpublished master's thesis). University of South Africa, Johannesburg, South Africa.

- Cloete, N., Fehnel, R., Maassen, P., Moja, T., Perold, H., & Gibbon, T. (Eds.). (2002). *Transformation in higher education: Global pressures and local realities in South Africa*. Pretoria, South Africa: Centre for Higher Education Transformation.
- Coates, H., & Radloff, A. (2014). Broader strategies for developing student engagement. In H. Coates & A. C. McCormick (Eds.), *Engaging university students. International insights from system-wide studies* (pp. 139-151). Singapore: Springer Science.
- Coetzee, L. R. (2011). *The relationship between students' academic self-concept, motivation and academic achievement at the University of the Free State* (Unpublished master's dissertation). University of South Africa, Pretoria, South Africa.
- Cokley, K. (2000). An investigation of academic self-concept and its relationship to academic achievement in African-American college students. *Journal of Black Psychology, 26*(2), 148-164. doi:10.1177/0095798400026002002
- Cokley, K., Komarraju, M., King, A., Cunningham, D., & Muhammad, G. (2003). Ethnic differences in the measurement of academic self-concept in a sample of African American and European American college students. *Educational and Psychological Measurement, 63*(4). 707-722. doi:10.1177/0013164402251055
- Cole, D. G. (2007). Do interracial interactions matter? An examination of student-faculty contact and intellectual self-concept. *The Journal of Higher Education, 78*(3), 249-281. doi:10.1353/jhe.2007.0015
- Cole, D., & Griffin, K. A. (2013). Advancing the study of student-faculty interaction: A focus on diverse students and faculty. In M. B. Paulsen (Ed.), *Higher education: Handbook of theory and research Vol. 28* (pp. 513-560). Iowa City, IA: Springer.
- Cole, D., & Jackson, J. (2005). Racial integration in higher education and students' educational satisfaction 50 years beyond Brown. In D. N. Byrne (Ed.), *Brown v. Board of Education: Its impact on public education 1954-2004* (pp. 249-270). New York, NY: The Thurgood Marshall Scholarship Fund.
- Collier-Reed, B. I., Wolmarans, N., & Smit, R. (2010, October). *The impact of NSC mathematics on student performance in mathematics in first-year engineering*

- programmes: Where does the gap lie?* Paper presented at the Academy of Science of South Africa's Mind the Gap forum, Cape Town: South Africa.
- Colom, R., & Lynn, R. (2004). Testing the developmental theory of sex differences in intelligence on 12-18 year olds. *Personality and Individual Differences*, 36(1), 75-82. doi:[http://dx.doi.org/10.1016/S0191-8869\(03\)00053-9](http://dx.doi.org/10.1016/S0191-8869(03)00053-9)
- Colvin, J. W. (2007). Peer tutoring and social dynamics in higher education. *Mentoring & Tutoring*, 15(2), 165-181. doi:10.1080/13611260601086345
- Comeaux, E., & Harrison, C. K. (2011). A conceptual model of student success for student athletes. *Educational Researcher*, 40(5), 245-245. doi:10.3102/0013189X11415260
- Compton, J. I., Cox, E., & Lanaan, F. S. (2006). Adult learners in transition. *New Directions for Student Services*, 114, 73-81. doi:10.1002/ss.208
- Conley, D. (2005). *College knowledge: What it really takes for students to succeed and what we can do to get them ready*. San Francisco, CA: Jossey-Bass.
- Conley, D. (2007). *Toward a more comprehensive conception of college readiness*. Eugene, OR: Educational Policy Improvement Centre.
- Conley, D. (2008). Rethinking college readiness. *New Directions for Higher Education*, 144, 3-13. doi:10.1002/he.321
- Conley, D. (2015). A new era for educational assessment. *Education Policy Analysis Archives*, 23(8), 1-36. Retrieved from <http://epaa.asu.edu/ojs/article/download/1983/1488>
- Considine, G. & Zappala, G. (2002). Influence of social and economic disadvantage in the academic performance of school students in Australia. *Journal of Sociology*, 38(2), 129-148. doi:10.1177/144078302128756543
- Cook, D., Evans, C., Love, J., Mao, Y., Robinson, K., Scerif, G., & Sharma, A. (2004). *Is language proficiency a predictor of academic success for international students? Implications for teaching practice*. Retrieved from www.nottingham.ac.uk/pesl/resources/prior/islangua218/

Correa, M., Dumas, B. K., Jones, C., Mbarika, V., & Ong'oa, I. M. (2015). Extracurricular activities and academic achievement: A literature review. *Global Advanced Research Journal of Educational Research and Review*, 4(9), 165-169. Retrieved from <http://garj.org/full-articles/extracurricular-activities-and-academic-achievement-a-literature-review.pdf?view=download>

Council on Higher Education (CHE) (2016). *South African Higher Education reviewed: Two decades of democracy*. Pretoria, South Africa: Council for Higher Education Retrieved from http://www.che.ac.za/sites/default/files/publications/CHE_South%20African%20higher%20education%20reviewed%20-%20electronic_0.pdf

Council on Higher Education (CHE). (2004). *South African higher education in the first decade of democracy*. Pretoria, South Africa: Council on Higher Education. Retrieved from <http://www.che.ac.za/documents/d000081/>

Council on Higher Education (CHE). (2007). *A case for improving teaching and learning in South African higher education* (Higher Education Monitor No. 6). Pretoria, South Africa: Council on Higher Education. Retrieved from http://www.che.ac.za/sites/default/files/publications/HE_Monitor_6_ITLS_Oct2007_0.pdf

Council on Higher Education (CHE). (2009). *The state of higher education in South Africa* (Higher Education Monitor No. 8). Pretoria, South Africa: Council on Higher Education. Retrieved from http://www.che.ac.za/documents/d000201/Higher_Education_Monitor_8.pdf

Council on Higher Education (CHE). (2010). *Access and throughput in South African higher education: Three case studies* (Higher Education Monitor No. 9). Pretoria, South Africa: Council for Higher Education. Retrieved from <http://www.che.ac.za/documents/d000206/>

Council on Higher Education (CHE). (2013). *A proposal for undergraduate curriculum reform in South Africa: The case for a flexible curriculum structure*. (Report of the Task Team on Undergraduate Curriculum Structure. Discussion document August 2013.) Pretoria, South Africa. Retrieved from http://www.che.ac.za/sites/default/files/publications/Full_Report.pdf

Factors and experiences related to academic success

- Council on Higher Education (CHE). (2014). *Vital Stats: Public Higher Education 2011*. Pretoria, South Africa: Council for Higher Education Retrieved from http://www.che.ac.za/media_and_publications/monitoring-andevaluation/vitalstats-public-higher-education-2011
- Crabtree, B., & Miller, W. (1999). A template approach to text analysis: Developing and using codebooks. In B. Crabtree & W. Miller (Eds.), *Doing qualitative research* (pp. 163-177). Newbury Park, CA: Sage.
- Credé, M., Roch, S. G., & Kieszczynka, U. M. (2010). Class attendance in College. *Review of Educational Research*, 80(2), 272-295. doi:10.3102/0034654310362998
- Crissman Ishler, J. L., Upcraft, M. L. (2005). The keys to first-year student persistence. In M. L. Upcraft, J. N. Gardner., & B. O. Barefoot (Eds.), *Challenging and supporting the first-year student: A handbook for improving the first year of college* (pp. 27-46). San Francisco, CA: Jossey-Bass
- Cronin, A. (2003, October) *Entry criteria and academic success of international students. Values and vision: Virtual and reality*. Paper presented at the Fourteenth annual ISANA conference, Yeppoon, Qld. Abstract retrieved from <http://trove.nla.gov.au/version/166844989>
- Cummins, J. (1984). Implications of bilingual proficiency for the education of minority language students. *Language Issues and Education Policies*, 119, 21-34.
- Dadgar, M (2012). *The academic consequences of employment for students enrolled in community college* (CCRC Working Paper no. 46,). New York City, NY: Community College Research Centre.
- Daempfle, P. A. (2003). An analysis of the high attrition rates among first year college science, math, and engineering majors. *Journal of College Student Retention*, 5(1), 37-52. doi:10.2190/DWQT-TYA4-T20W-RCWH
- Dambudzo, I. I (2009). *The relationship between learner self-concept and achievement in secondary schools in Zimbabwe* (Unpublished doctoral dissertation). University of South Africa, Pretoria, South Africa.

- Danganan, R. G., & Nuqui, A. V. (2015). Personal development and academic performance of students and their participation in co and extra-curricular activities: Inputs to students' enhancement program. *World Journal of Educational Research*, 2(2), 1- 9. Retrieved from http://www.wjer.org/WJER_Vol.%202,%20No.%202,%20June%202015/PERSONAL.pdf
- Das, N. (2009). *The influence of individual factors on web-based developmental education course success in a two-year technical college* (Unpublished doctoral dissertation). University of New Orleans, New Orleans, LA.
- Dass-Brailsford, P. (2005). Exploring resiliency: Academic achievement among disadvantaged black youth in South Africa. *South African Journal of Psychology*, 35(3), 574-591. doi:10.1177/008124630503500311
- Davidowitz, B., & Schreiber, B. (2008). Facilitating adjustment to higher education: Towards enhancing academic functioning in an academic development program. *South African Journal of Higher Education*, 22(1), 191-206. Retrieved from <http://hdl.handle.net/11427/9836>
- Davin, R. J. (2009). *in Uitkomsgebaseerde assesseringsmodel vir die ontvangsjaar* (Unpublished doctoral dissertation). University of South Africa, Pretoria, South Africa.
- Davis McGraw, M. A. (2015). The growth of learning colleges including a case study from 2008 revisited in 2015. In E. Railean, G. Walker, A. Elci, & L. Jackson, (Eds.), *handbook of research on applied learning theory and design in modern education* (pp. 520-545). Hershey, PA: Information Science Reference.
- Dayioğlu, M., & Türüt-Aşık, S. (2004). *Gender differences in academic performance in a large public university in Turkey* (ERC Working Papers no. 147 in Economics,). Middle East Technical University, Ankara, Turkey.
- De Wet, C., & Wolhuter, C. (2009). A transitional study of some South African educational issues. *South African Journal of Education*, 29(3). Retrieved from http://www.scielo.org.za/scielo.php?script=sci_arttext&pid=S0256-01002009000300005

- DeFreitas, S. C., & Bravo, A. (2012). The influence of involvement with faculty and mentoring on the self-efficacy and academic achievement of African American and Latino college students. *Journal of the Scholarship of Teaching and Learning*, 12(4), 1-11. Retrieved from <http://josotl.indiana.edu/article/view/2083>
- DeFreitas, S. C., & Rinn, A. (2013). Academic achievement in first generation college students: The role of academic self-concept. *Journal of the Scholarship of Teaching and Learning*, 13(1), 57-67. Retrieved from <http://josotl.indiana.edu/article/view/2161/3061>
- Deil-Amen, R. (2011). Socio-academic integrative moments: Rethinking academic and social integration among two-year college students in career-related programs. *The Journal of Higher Education*, 82(1), 54-91. doi:10.1353/jhe.2011.0006
- Demaris, M. C., & Kritsonis, W. A. (2008). The classroom: Exploring its effects on student persistence and satisfaction. *Focus on Colleges, Universities, and Schools*, 2(1), 1-9. Retrieved from <http://files.eric.ed.gov/fulltext/ED501268.pdf>
- Demetriou, C. & Schmitz-Sciborski, A. (2011). Integration, motivation, strengths and optimism: Retention theories past, present and future. In R. Hayes (Ed.), *Proceedings of the 7th National Symposium on Student Retention, 2011, Charleston* (pp. 300-312). Norman, OK: The University of Oklahoma.
- Denzin, N. K. & Lincoln, Y. S. (2005). Introduction: The discipline and practice of qualitative research. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 1-32). California, CA: Sage.
- Denzin, N. K. (1978). *The research act: A theoretical introduction to sociological methods*. New York, NY: McGraw-Hill.
- Department of Education (DOE) (2001). *National plan for higher education*. Pretoria, South Africa: Government Printers.
- Department of Education (DOE). (1998). *Education White Paper 4: A programme for the transformation of Further Education and Training* (General Notice 2188 of 1998). Pretoria, South Africa: Government Printers.

Factors and experiences related to academic success

Department of Education (DOE). (2005). *The National Senior Certificate: A qualification at level 4 on the National Qualifications Framework (NQF)*. Pretoria, South Africa: Government Printers.

Department of Education (DOE). (2008, June). *Address to the Parliamentary Portfolio Committee on education*. Presented at Parliamentary Portfolio commission meeting. Pretoria, South Africa. Retrieved from www.pmg.org.za/files/docs/080624hesa.pdf

Department of Higher Education and Training (DHET). (2011). *Report on the Ministerial Committee for the Review of the Provision of Student Housing at South African Universities*. Pretoria, South Africa: Government Printers.

Department of Higher Education and Training (DHET). (2014a). *Ministerial statement on student enrolment planning 2014/15 – 2019/20 for universities*. Pretoria, South Africa: Government Printers.

Department of Higher Education and Training (DHET). (2014b). *Statistics on post-school education and training in South Africa: 2012*. Pretoria, South Africa: Government Printers.

Department of Higher Education and Training (DHET). (2016). *Statistics on post-school education and training in South Africa: 2014*. Pretoria, South Africa: Government Printers.

DeRemer, M. A. (2002). *The adult student attrition decision process (ASADP) model* (Unpublished doctoral dissertation). The University of Texas at Austin, Austin, TX.

DeSimone, J. S. (2008, May). *The impact of employment during school on college student academic performance* (NBER working paper series 14006). National Bureau of Economic Research. Cambridge, MA.

DeVellis, R. F. (2003). *Scale development: Theory and applications*. Thousand Oaks, CA: Sage.

Dillman, D. A. (2000). *Mail and internet surveys: The tailored design method*. Brisbane, Australia: Wiley.

Factors and experiences related to academic success

- Dixon, J., & Durrheim, K. (2003). Contact and the ecology of racial division: Some varieties of informal segregation. *British Journal of Social Psychology*, 42(1), 1-23. doi:10.1348/014466603763276090
- Dodorico McDonald, J. (2009). Measuring personality constructs: The advantages and disadvantages of self-reports, informant reports and behavioural assessments. 1(1), Retrieved from <http://www.studymode.com/course-notes/Measuring-Personality-Constructs-The-Advantages-And-987357.html>
- Donahue, B. (2015). *Impact of being a resident assistant on student's academic success*. (Unpublished master's thesis). University of Nebraska, Lincoln, NE.
- Dornan, E. L. (2015). *Identifying characteristics that influence first time, full-time freshmen persistence and exploring effective and strategic retention initiatives for an at-risk student population* (Doctoral dissertation). Retrieved from <http://aquila.usm.edu/cgi/viewcontent.cgi?article=1138&context=dissertations>
- Du Plessis, L., & Gerber, D. (2012). Academic preparedness of students – An exploratory study. *The Journal for Transdisciplinary Research in Southern Africa*, 8(1), 81-94. Retrieved from <http://dspace.nwu.ac.za/handle/10394/3605>
- Duggan, M. H., & Pickering, J. W. (2008). Barriers to transfer student academic success and retention. *Journal of College Student Retention*, 9(4), 437-459. doi:10.2190/CS.9.4.c
- Duggleby, W. (2005). What about focus group interaction data? *Qualitative Health Research*, 15(6), 832–840. doi:10.1177/1049732304273916
- Durkheim, E. (1961). *Suicide* (J Spaulding & G. Simpson, trans). Glencoe: The Free Press.
- Dutch, B., Gron, S., & Allen, D. (Eds.). (2001). *The power of problem-based learning: A practical 'how to' for teaching undergraduate courses in any discipline*. Sterling, VA: Stylus.
- Dweck, C. S. (2000). *Self-theories: Their role in motivation, personality, and development*. Philadelphia, PA: Psychology Press.

Factors and experiences related to academic success

- Eccles, J. S. (2005). Influences of parents' education on their children's educational attainments: The role of parent and child perceptions. *London Review of Education*, 3(3), 191-204. doi:10.1080/14748460500372309
- Eiselen, R., & Geysler, H. (2003). Factors distinguishing between achievers and at-risk students: A qualitative and quantitative synthesis. *South African Journal of Higher Education*, 17(2), 118-130. Retrieved from http://reference.sabinet.co.za/wagtail.ufs.ac.za/webx/access/electronic_journals/high/high_v17_n2_a14.pdf
- El-Khawas, E. (2003). The many dimensions of student diversity. In S. R. Komives, D. B. Woodard, Jr. & Associates (Eds.), *Student Services: A handbook for the profession* (pp. 45-62). San Francisco, CA: Josey Bass.
- Elkins, S. A., Braxton, J. M., & James, G. W. (2000). Tinto's separation stage and its influence on first-semester college student persistence. *Research in Higher Education*, 41(2). Retrieved from <http://link.springer.com/article/10.1023/A:1007099306216#page-1>
- Ender, S. C., & Newton, F. B. (2000). *Students helping students: A guide for peer educators on college campuses*. San Francisco, CA: Jossey-Bass.
- Endo, J. J., & Harpel, R. L. (1982). The effect of student-faculty interaction on student's educational outcomes. *Research in Higher Education*, 16(2), 115-138. Retrieved from http://chapman.edu/students/services/housing-and-residence/_files/housing-pdfs/endo_harpel-1982.pdf
- Eng, S., Kanitar, K., Cleveland, H. H., Herbert, R., Fischer, J., & Wiersma, J. D. (2008). School achievement differences among Chinese and Filipino American students: Acculturation and the family. *Educational Psychology*, 28(5), 536-550. doi:10.1080/01443410701861308
- Engstrom, Z. B. (2008). *The impact of learning community involvement and campus climate on student satisfaction and the retention of Latino students at a highly selective private institution* (Unpublished doctoral dissertation). University of Southern California, Los Angeles, CA.

Factors and experiences related to academic success

- Evans, N. J., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2nd ed.). (2010). *Student development in college: Theory, research, and practice*. San Francisco, CA: Jossey-Bass.
- Faculty of the Humanities. (2010). *Integration of developmental modules and main-stream modules in the B.A. & B.Soc.Sc four-year curriculum* (Adapted). Unpublished report. University of the Free State. Bloemfontein, South Africa, Author.
- Fakude, X. S. (2012). *Some factors which contribute to poor academic achievement among undergraduate students at a tertiary institution* (Unpublished master's thesis). University of Zululand, Kwadlangezwa, South Africa.
- Falchikov, N. (2001). *Learning together: Peer tutoring in higher education*. London, United Kingdom: Routledge Falmer.
- Fanghanel, J. (2007). Investigating university lecturers' pedagogical constructs in the working context. *The Higher Education Academy*, (January issue), 1-19. Retrieved from <https://www.heacademy.ac.uk/system/files/fanghanel.pdf>
- Favish, J. (2005). Equity in changing patterns of enrolment, in learner retention and success at the Cape Technikon. *South African Journal of Higher Education* 19(2): 274-291. Retrieved from http://reference.sabinet.co.za/webx/access/journal_archive/10113487/1986.pdf
- Favish, J., & Hendry, J. (2010). UCT's admissions policies: Is the playing field level? *South African Journal of Higher Education*, 24(2), 268-297. Retrieved from http://reference.sabinet.co.za/webx/access/electronic_journals/high/high_v24_n2_a6.pdf
- Feast, V. (2002). The impact of IELTS scores on performance at university. *International Educational Journal*, 3(4), 70-85. Retrieved from <http://ehlt.flinders.edu.au/education/iej/articles/v3n4/feast/paper.pdf>
- Fereday, J., & Muir-Cochrane, E. (2006). Demonstrating rigor using thematic analysis: A hybrid approach of inductive and deductive coding and theme development. *International Journal of Qualitative Methods*, 5(1), 1-11. Retrieved from http://www.ualberta.ca/~iiqm/backissues/5_1/pdf/fereday.pdf

Factors and experiences related to academic success

- Findley, M. J., & Cooper, H. M. (1983). Locus of control and academic achievement: A literature review. *Journal of Personality and Social Psychology*, 44(2), 419-427. doi:10.1037/0022-3514.44.2.419
- Firestone, W. A. (1993). Alternative arguments for generalizing data as applied to qualitative research. *Educational Researcher*, 22(4), 16-23. doi:10.3102/0013189X022004016
- Fisher, C. B. (2004): Informed consent and clinical research involving children and adolescents: Implications of the Revised APA Ethics Code and HIPAA. *Journal of Clinical Child & Adolescent Psychology*, 33(4), 832-839. doi:10.1207/s15374424jccp3304_18
- Fisher, G., & Scott, I. (2011). *Closing the skills and technology gap in South Africa*. (Background paper 3: The role of higher education in closing the skills gap in South Africa). The World Bank Human Development Group, Pretoria, South Africa.
- Flaga, C. T. (2006). The process of transition for community college transfer students. *Community College Journal of Research and Practice*, 30(1), 3-19. doi:10.1080/10668920500248845
- Flowers, L. A. (2006). Effects of attending a 2-year institution on African American males' academic and social integration in the first year of college. *Teachers College Record*, 108(2), 267-286. doi:10.1111/j.1467-9620.2006.00651.x
- Foreman, E. A., & Retallick, M. S. (2013). Using involvement theory to examine the relationship between undergraduate participation in extracurricular activities and leadership development. *Journal of Leadership Education*, 12(2), 56-73. doi:10.12806/V12/I2/56
- Fortney, S. D., Johnson, D. I., & Long, K. M. (2001). The impact of compulsive communicators on the self-perceived competence of classroom peers: An investigation and test of instructional strategies. *Communication Education*, 50(4), 357-373. doi:10.1080/03634520109379261
- Foxcroft, C. & Roodt, G. (2009). *Introduction to psychological assessment in the South African context* (3rd ed.). Cape Town, South Africa: Oxford University Press.

Factors and experiences related to academic success

- Fram, M. S., Miller-Cribbs, J. E., & Van Horn, L. (2007). Poverty, race and the contexts of achievement: Examining educational experiences of children in the U.S. South. *Social Work, 52*(4), 309-319. doi:10.1093/sw/52.4.309
- Fraser, W. J., & Killen, L. R. (2003). Factors influencing academic success or failure of first year and senior university students: Do education students and lecturers perceive things differently? *South African Journal of Education, 23*(4), 254-260. doi:10.1080/02643290802003216
- Fraser, W. J., & Killen, L. R. (2005). The perceptions of students and lecturers of some factors influencing academic performance at two South African universities. *Perspectives in Education, 23*(1), 25-40. Retrieved from http://repository.up.ac.za/bitstream/handle/2263/4887/Fraser_Perceptions%282005%29.pdf?sequence=1
- Freeman, J. G., & Areepattamannil, S. (2008). Academic achievement, academic self-concept and academic motivation of immigrant adolescents in the greater Toronto area secondary schools. *Journal of Advanced Academics, 19*(4), 700-743. doi:10.4219/jaa-2008-831
- Furnham, A., Chamorro-Premuzic, T., & McDougall, F. (2002). Personality, cognitive ability, and beliefs about intelligence as predictors of academic performance. *Learning and Individual Differences, 14*(1), 47-64. doi:10.1016/j.lindif.2003.08.002
- Furr, S. R., & Elling, T. W. (2000). The influence of work on college student development. *NASPA Journal, 37*(2), 454-470. doi:10.2202/1949-6605.1108
- García-Vargas, M. C., Rizo-Baeza, M., & Cortés-Castell, E. (2016). Impact of paid work on the academic performance of nursing students. *Peer Journal, 4*(6), doi:10.7717/peerj.1838
- Gbadamosi, G., & De Jager, J. (2009). 'What you see is what you get': Service quality, students' perceptions and satisfaction and South African universities. *South African Journal of Higher Education, 23*(5), 877-893. doi:10.4314/sajhe.v23i5.48806
- Geng, G., & Midford, R. (2015). Investigating first year education students' stress level. *Australian Journal of Teacher Education, 40*(6), 1-12. doi:10.14221/ajte.2015v40n6.1

- George, D., Dixon, S., Sansal, E., Gelb, S. L., & Pheri, T. (2008). Time diary and questionnaire assessment of factors associated with academic and personal success among university undergraduates. *Journal of American College Health, 56*(6), 706-715. doi:10.3200/JACH.56.6.706-715
- Gibson, M. A. (2005). Promoting academic engagement among minority youth: Implications from John Ogbu's Shaker Heights ethnography. *International Journal of Qualitative Studies in Education, 18*(5), 581-603. doi:10.1080/09518390500224853
- Gieg, S., Oyarzun, L., Reardon, J., & Gant, J. C. (2016). The impact of student organizations on sense of belonging for international students. *Journal of the Student Personnel Association at Indiana University, 2015-2016*. 1-15. Retrieved from <http://www.indiana.edu/~spaiu/journal/editions/2016/1%20Impact%20of%20Student%20Organizations.pdf>
- Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: Interviews and focus groups. *British Dental Journal, 204*(6), 291-295. doi:10.1038/bdj.2008.192
- Glass, C. R., Kociolek, E., Wongtrirat, R., Lynch, R. J., Cong, S. (2015). Uneven Experiences: The impact of student-faculty interactions on international students' sense of belonging. *Journal of International Students, 5*(4), 353-367. Retrieved from <http://files.eric.ed.gov/fulltext/EJ1066288.pdf>
- Glass, J., Jr., & Harrington, A. (2002). Academic performance of community college transfer students and 'native' students at a large state university. *Community College Journal of Research practice, 26*(5), 415-430. doi:10.1080/02776770290041774
- Golafshani, N. (2003). Understanding reliability and validity in qualitative research. *The Qualitative Report, 8*(4), 597-607. Retrieved from <http://nsuworks.nova.edu/tqr/vol8/iss4/6>
- Govender, T. (2013, April 20). The education gap – Practical solutions to key barriers. *University World News*. Retrieved from http://www.universityworldnews.com/article.php?story=2013_0419125136707

Factors and experiences related to academic success

- Grabowski, C., Rush, M., Ragen, K., Fayard, V., & Watkins-Lewis, K. (2016). Today's non-traditional student: Challenges to academic success and degree completion. *Inquiries Journal/Student Pulse*, 8(03). Retrieved from <http://www.inquiriesjournal.com/a?id=1377>
- Graham, G. M. (2007). *Achievement motivation, internal locus of control, goal orientation, and academic self-efficacy as outcome measures for a course designed to positively affect student academic performance* (Unpublished doctoral dissertation). University of Oklahoma, Norman: OK.
- Graham, S. W., and Gisi, S. L. (2000). Adult undergraduate students: What role does college involvement play? *NASPA Journal*, 38(1): 99-121. doi:<http://dx.doi.org/10.2202/1949-6605.1122>
- Graunke, S. S., & Woosley, S. A. (2005). An exploration of the factors that affect the academic success of college sophomores. *College Student Journal*, 39(2), 367. Retrieved from <http://eric.ed.gov/?id=EJ714068>
- Graunke, S. S., Woosley, S. A., & Helms, L. L. (2006). How do their initial goals impact students' chances to graduate? An exploration of three types of commitment. *NACADA*, 26(1), 13-18. doi:<http://dx.doi.org/10.12930/0271-9517-26.1.13>
- Gravetter, F. J., & Forzano, L. B. (2009). *Research methods for the behavioral sciences* (3rd ed.). Belmont, CA: Wadsworth Cengage Learning.
- Griesel, M. (2006). *'n Kriminologiese ondersoek na die belewenis van motorvoertuigbestuurders wat padwoede openbaar* (Unpublished master's thesis). University of Pretoria, Pretoria, South Africa.
- Griffin, K., & Allen, W. (2006). Mo' Money, Mo' Problems? High-achieving black high school students' experiences with resources, racial climate and resilience. *The Journal of Negro Education*, 75(3), 478-494. Retrieved from https://www.researchgate.net/publication/287612236_Mo'_money_mo'_problems_High-achieving_black_high_school_students'_experiences_with_resources_racial_climate_and_resilience
- Grussendorff, S., Liebenberg, M., & Houston, J. (2004). Selection for the Science foundation program (University of Natal): The development of a selection instrument. *South*

Factors and experiences related to academic success

- African Journal for Higher Education*, 18(1), 265-272. Retrieved from <http://content.ajarchive.org/cdm4/document.php?CISOROOT=/10113487&CISOPTR=241&REC=18>
- Guba, E. G., (1981). Criteria for assessing the trustworthiness of naturalistic inquiries. *Educational Communication and Technology Journal*, 29, 75-91. doi:10.1007/BF02766777
- Gunning, E. (2002, December 15). Afrikaanse ouers laat kinders in Engels leer. *Rapport*, p. 14.
- Habley, W. R. (2005, September). *Why bother with academic advising?* Paper presented at the Graduation Rates Conference, University of Texas, Austin, TX. Retrieved from http://www.utsystem.edu/aca/initiatives/gradrates/WHabley_Why_bother_05.ppt
- Hader, J. A., (2011). *William G. Spady, agent of change: An oral history* (Dissertations, Paper No. 130). Retrieved from http://ecommons.luc.edu/luc_diss/130
- Hagedorn, L. (2006). *How to define retention: A new look at an old problem*. Los Angeles, LA: University of Southern California.
- Halawa, I. (2006). The impact of student-faculty informal interpersonal relationships on intellectual and personal development. *College Student Journal*, 40(3), 670-678. Retrieved from <http://eric.ed.gov/?id=EJ765367>
- Hannaway, D. A. M. (2012). *The influence of ecosystemic factors on black student teachers' perceptions and experiences of early childhood education* (Unpublished master's thesis). University of Pretoria, Pretoria, South Africa.
- Hatakka, M. R. (2012, May). *The importance of academic and social integration in higher education*. International conference innovative research in changing and challenging world, Phuket, Thailand.
- Hearn, J. C. (2006, November). *Student success: What research suggests for policy and practice*. Report prepared under contract for the National Symposium on Student Success, National Postsecondary Education Collaborative, US Department of Education. Washington, DC.

Factors and experiences related to academic success

- Herzog, S. (2006). *The effect of high school attended on academic preparation and retention of college freshmen*. Reno, NV: Institutional Analysis University of Nevada.
- Heugh, K. (2000, September 11). Moedertaalonderrig. *Volksblad*, p. 6.
- Higher Education South Africa. (2009, August). *National benchmark tests project standards for national examination & assessment systems: Department of Higher Education (Briefing on the National Benchmark Test Project)*. Pretoria, South Africa: Author.
- Hirsch, G. (2001). *Helping college students succeed: A model for effective intervention*. Philadelphia, PA: Bruner-Routledge.
- Hlalele, L. (2015). *University of the Witwatersrand residence students' perspectives on factors that promote or hinder academic success* (Unpublished master's thesis). University of the Witwatersrand, Johannesburg, South Africa.
- Hobden, S., & Hobden, P. (2015). A study of the transition pathways of school level scholarship recipients into work and tertiary education. *South African Journal of Education*, 35(3), 1-10. doi:10.15700/saje.v35n3a1054
- Hodum, T. L. (2007). *An investigation of how students, faculty, and administrators within a particular liberal arts college perceived a new-student orientation program's effect on students' social integration and retention* (Unpublished doctoral dissertation). University of Missouri, Columbia. MO.
- Hoffman, K., Llagas, C., Snyder, T. D. (2003). *Status and trends in the education of blacks* (NCES 2003-04). Washington, DC: U.S. Dept. of Education, National Center for Education Statistics.
- Hollenbeck, J. R., Klein, H. J., O'Leary, A. M., & Wright, P. M. (1989). Investigation of the construct validity of a self-report measure of goal commitment. *Journal of Applied Psychology*, 74(6), 951-956. doi:10.1037/0021-9010.74.6.951
- Hornberger, N. & Chick, K. (2001). Co-constructing school safe time: Safe talk practices in Peruvian and South African classrooms. In M. Martin-Jones, & M. Heller. (Eds.), *Voices of authority: Educational and linguistic differences* (pp. 31-55). New Jersey, NJ: Ablex.

Factors and experiences related to academic success

- Horowitz, J. B., & Spector, L. (2005). Is there a difference between private and public education on college performance? *Economics of Education Review*, 24(2), 189–195. doi:10.1016/j.econedurev.2004.03.007
- Horton, J. (2015). Identifying at-risk factors that affect college student success. *International Journal of Process Education*, 7(1), 83-102. Retrieved from <http://www.pcrest.com/research/x2015%20Identifying%20At-Risk%20Factors%20That%20Affect%20College%20Student%20Success.pdf>
- Howell, D. C. (2004). *Fundamental statistics for the behavioral sciences* (5th ed.). Belmont, CA: Brooks/Cole.
- Huffman, T. E. (2010). *Perspectives on American Indian education. Taking a look at academic success and the achievement gap*. Plymouth, United Kingdom: AltaMira Press.
- Huysamen, G. K. (2001). *Introductory statistics and research design for the behavioural sciences*. Cape Town, South Africa: Human & Rossouw Academica.
- Huysamen, G. K. (2003). Die verband tussen matriekprestasie en eerstejaarsprestasie vir opeenvolgende innames aan dieselfde universiteit. *South African Journal of Higher Education*, 15(3), 142-149. Retrieved from <http://www.ajol.info/index.php/sajhe/article/view/25335>
- Inkelas, K. K., Daver, Z. E., Vogt, K. E., & Brown Leonard, J. (2007). Living-learning programs and first-generation college students' academic and social transition to college. *Research in Higher Education*, 48(4), 403-434. doi:10.1007/s11162-006-9031-6
- Jacobs, M. & Pretorius, E. (2016). First-year seminar intervention: Enhancing first year mathematics performance at the University of Johannesburg. *Journal of Student Affairs in Africa*, 4(1), 77-86. doi:10.14426/jsaa.v4i1.146
- Jæger, M. M. (2011). Does cultural capital really affect academic achievement? *Sociology of Education*, 84(4), 281-298. doi:10.2139/ssrn.1698751

- Jaffer, S., Ng'ambi, D., & Czerniewich, L. (2007). The role of ICT's in higher education in South Africa: One strategy for addressing teaching and learning challenges. *International Journal of Education and Development using Information and Communication Technology*, 3(4), 131-142. Retrieved from https://www.researchgate.net/publication/255610040_The_role_of_ICTs_in_higher_education_in_South_Africa_One_strategy_for_addressing_teaching_and_learning_challenges
- Jama. M. P., Mapesela, M. L. E., & Beylefeld, A. A. (2008). Theoretical perspectives on factors affecting the academic performance of students. *South African Journal of Higher Education*, 22(5), 922-1005. Retrieved from <http://www.ajol.info/index.php/sajhe/article/view/42919>
- Jameel, S. H., & Hamdan, A. (2015). Effects of student's attendance on accounting student's performance. *International Journal of Business and Management Review*, 3(5), 79-93. Retrieved from <http://www.eajournals.org/wp-content/uploads/Effects-of-student---s-attendance-on-accounting-student---s-performance.pdf>
- Jansen, J. D. (19 October 2009). *For such a time as this: Inauguration speech of the 13th Rector and Vice Chancellor of the University of the Free State*. [Audio podcast] Retrieved from <http://blogs.timeslive.co.za/hartley/2009/10/20/jonathan-jansens-inaugural-speech-as-vice-chancellor-of-ufs-full-text/>
- Jansen, J. D. (2010). *Openingstoespraak 2010 by die Universiteit van die Vrystaat*. [Audio podcast] Retrieved from <http://www.ufs.ac.za/faculties/content.php?FCCode=H1&DCCode=ALL&DivCode=0&uid=2052>
- Jeffreys, M. R. (2012). *Nursing student retention: Understanding the process and making a difference*. New York, NY: Springer.
- Jenkins, A. L. (2007). *Assessing factors that distinguish first-generation college students from non-first generation college students at an urban comprehensive university* (Unpublished doctoral dissertation). Blacksburg, VA: Virginia Polytechnic Institute and State University.
- Jensen, D. H., & Jetten, J. (2015). Bridging and bonding interactions in higher education: social capital and students' academic and professional identity formation. *Frontiers in Psychology*, 6(126). doi:10.3389/fpsyg.2015.00126

- Jensen, U. (2011). *Factors influencing student retention in higher education* (Research and evaluation summary report). Retrieved from Research and Evaluation, Kamehameha Division webpage: <https://www.scribd.com/document/216030781/Factors-Influencing-Student-Retention-in-Higher-Education>
- Jez, S. J., & Wassmer, R. W. (2011). *The impact of learning time on academic achievement. prepared for the Faculty Fellows Research Program*. California State University, Sacramento: Center for California Studies. Long Beach, CA.
- Jobe, R. L., Spencer, M., Hinkle, J. P., & Kaplan, J. A. (2016). The first year: A cultural shift towards improving student progress. *Higher Learning Research Communications*, 6(1), 10-20. Retrieved from <http://dx.doi.org/10.18870/hlrc.v6i1.305>
- Johnson, P., & Harris, D. (2002). Qualitative and quantitative issues in research design. In D. Partington (Ed.), *Essential skills for management* (pp. 99-115). London, United Kingdom: Sage.
- Johnson, R. B., & Christensen, L. B. (2004). *Educational research: Quantitative, qualitative, and mixed approaches*. Boston, MA: Allyn and Bacon.
- Johnson, R. B., & Christensen, L. B. (2012). *Educational research: Quantitative, qualitative and mixed approaches* (4th ed.). Thousand Oaks, CA: Sage.
- Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm time has come. *Educational Researcher*, 33(7), 14-26. Retrieved from <http://edr.sagepub.com/content/33/7/14.abstract>
- Johnson, R. B., Onwuegbuzie, A. J., & Turner, L. A. (2007). Toward a definition of mixed methods research. *Journal of Mixed Method Research*, 1(2), 112-133. doi:10.1177/1558689806298224
- Jones, B., Coetzee, G., Bailey, T., & Wickham, S. (2008). *Factors that facilitate success for disadvantaged higher education students. An investigation into approaches used by REAP, NSFAS and selected higher education institutions* (Final research report). Retrieved from Rural Education Access Program website: http://www.reap.org.za/pieces/reports/pdf/tracking_reports/2008_June_factors_that_facilitate_success.pdf

- Jury, M., Smelding, A., & Darnon, C. (2015). First-generation students' underperformance at university: The impact of the function of selection. *Frontiers in Psychology, 6*(710). doi:10.3389/fpsyg.2015.00710
- Kaminski, P. L., Laster, S. A., Rosen, L. A., & Turnock, P. M. (2006). Predictors of academic success among college students with attention disorders. *Journal of College Counselling, 9*, 60-71. doi:10.1002/j.2161-1882.2006.tb00093.x
- Kara, A., & DeShields, O. W. Jr. (2004). Business student satisfaction, intentions and retention in higher education: An empirical investigation. *Journal of Marketing Theory and Practice, 12*(2), 59-72. Retrieved from http://www.elmar-list.org/MEQ_Vol_3/student_satisfaction.pdf
- Karp, M. M. (2011). *Toward a new understanding of non-academic student support: Four mechanisms encouraging positive student outcomes in the community college* (CCRC Working Paper no. 28.), New York City, NY: Community College Research Centre.
- Keeve, A., Naudé, L., & Esterhuysen, G. K. (2012). Enkele voorspellers van die akademiese prestasie van eerstejaarstudente in drie- en vierjaarkurrikulums. *Acta Academica, 44*(1), 122-159. Retrieved from http://www.sabinet.co.za/abstracts/academ/academ_v44_n1_a6.html
- Keller, D. A. (2011). *An integrated model of early community college student success: Understanding success in developmental mathematics* (Unpublished doctoral dissertation). University of Iowa, Iowa City. IW.
- Kersop, L. (2008). *Kognitiewe en nie-kognitiewe voorspellers van akademiese sukses met betrekking tot 'n universiteit se alternatiewe hertoelatingsbeleid* (Unpublished master's thesis). University of Johannesburg, Johannesburg, South Africa.
- Kessi, S., & Cornell, J. (2016). Coming to UCT: Black students, transformation and discourses of race. *Journal of Student Affairs in Africa, 3*(2), 1-16. doi:10.14426/jsaa.v3i2.132
- Kim, Y. K. & Lundberg, C. A. (2015). A structural model of the relationship between student-faculty interaction and cognitive skills development among college students. *Research in Higher Education, 57*(3), 288-309. doi:10.1007/s11162-015-9387-6

- Kim, Y. K. (2010). Racially different patterns of student-faculty interaction in college: A focus on levels, effects, and causal directions. *Journal of the Professoriate*, 3(2), 162-189. Retrieved from <http://web.a.ebscohost.com/abstract?direct=true&profile=ehost&scope=site&authtype=crawler&jrnl=15567699&AN=65918878&h=bqMvBjiwqk%2fzqZkp9NbDreAzQadOZt95cSWkj7XJggLnOFNy6Q5peg1tw5BAZgMk1A2KHYejmAtgayG9epQGQ%3d%3d&crl=f&resultNs=AdminWebAuth&resultLocal=ErrCrlNotAuth&crlhashurl=login.aspx%3fdirect%3dtrue%26profile%3dehost%26scope%3dsite%26authtype%3dcrawler%26jrnl%3d15567699%26AN%3d65918878>
- King, J. E., (2000). *Gender equity in higher education: Are male students at a disadvantage?* Washington, DC: American Council of Education.
- Klein, H. J., Wesson, M. J., Hollenbeck, J. R., Wright, P. M., & DeShon, R. P. (2001). The assessment of goal commitment: A measurement model meta-analysis. *Organizational Behavior and Human Decision Processes*, 85(1), 32-55. doi:10.1006/obhd.2000.2931
- Klein, S. P., Kuh, G. D., Chun, M., Hamilton, L., & Shavelson, R. (2005). An approach to measuring cognitive outcomes across Higher Education institutions. *Research in Higher Education*, 46(3), 251-276. doi:10.1007/s11162-004-1640-3
- Kobal, D., & Musek, J. (2001). Self-concept and academic achievement: Slovenia and France. *Personality and Individual Differences*, 30(5), 887-899. doi:10.1016/S0191-8869(00)00081-7
- Koch, E. (2007). Die evaluering van 'n eentalige toelatingstoets wat vir die toelating tot hoër onderwys in 'n veeltalige konteks gebruik word. *SA Tydskrif vir Bedryfsielkunde*, 33(1), 90-101. Retrieved from https://www.google.co.za/url?sa=t&rct=j&q=&esrc=s&source=web&cd=2&cad=rja&sqi=2&ved=0CDQQFjAB&url=http%3A%2F%2Fwww.co.za%2Findex.php%2Fsajip%2Farticle%2Fdownload%2F255%2F252&ei=HhBHUcGAEeqX0AXFroG4DA&usg=AFQjCNHRw4DQmlKKLF_EZMm2-FORfXyOQw&bvm=bv.43828540,d.d2k
- Koen, C. (2001). *Improving time-to-degree among master's and doctoral students at the University of the Western Cape*. Belville, South Africa: Education Policy Unit.
- Koen, C. (2007). *Postgraduate student retention and success: A South African case study*. Human Sciences Research Council. Retrieved from <http://www.hsrcpress.ac.za>

- Komaraju, M., & Nadler, D. (2013). Self-efficacy and academic achievement: Why do implicit beliefs, goals and effort regulation matter? *Learning and Individual Differences, 25*(6), 67-72. doi:10.1016/j.lindif.2013.01.005
- Komaraju, M., Musulkin, S., & Bhattacharya, G. (2010). Role of student-faculty interactions in developing college students' academic self-concept, motivation, and achievement. *Journal of College Student Development, 51*(3), 332-342. Retrieved from [http://eric.ed.gov/?id= EJ887566](http://eric.ed.gov/?id=EJ887566)
- Korir, D. K., & Kipkemboi, F. (2014). The impact of school environment and peer influences on students' academic performance in Vihiga County, Kenya. *International Journal of Humanities and Social Sciences, 4*(5), 240-251. Retrieved from <http://www.ijhssnet.com>.
- Kornilova, T. V., Kornilov, S. A., & Chumakova, M. A. (2009). Subjective evaluations of intelligence and academic self-concept predict academic achievement: Evidence from a selective student population. *Learning and Individual Differences, 19*(4), 596-608. doi:10.1016/j.lindif.2009.08.001
- Korobova, N. (2012). *A comparative study of student engagement, satisfaction, and academic success among international and American students* (Unpublished doctoral dissertation). Iowa State University, Ames, IW.
- Korobova, N., & Starobin, S. S. (2015). A comparative study of student engagement, satisfaction, and academic success among international and American students. *Journal of International Students, 5*(1), 72-85. Retrieved from <http://files.eric.ed.gov/fulltext/EJ1052833.pdf>
- Krause, K. (2005). *Enhancing student engagement in the first year: 10 strategies for success*. Griffith Institute for Higher Education. Retrieved from http://www.griffith.edu.au/gihe/pdf/gihe_tipsheet_web_ese.pdf
- Kritzinger, J. (1995). Introducing Focus Groups, *British Medical Journal, 311*(7000), 299-302. Retrieved from <http://www.jstor.org/stable/29728251>
- Krueger, R. A. (1994). *Focus groups: A practical guide for applied research* (2nd ed.). Thousand Oaks, CA: Sage.

Factors and experiences related to academic success

- Krueger, R. A. (2000). *Focus groups: A practical guide for applied research* (3rd ed.). Thousand Oaks, CA: Sage.
- Krueger, R. A., & Casey, M. A. (2000). *Focus groups: A practical guide for applied researchers* (3rd ed.). Thousand Oaks, CA: Sage.
- Kuh, G. D. (2001). Assessing what really matters to student learning: Inside the national survey of student engagement. *Change*, 33(3), 10-17. Retrieved from [http://cpr.iub.edu/uploads/Assessing_What_Really_Matters_To_Student_Learning_\(Kuh,%202001\).pdf](http://cpr.iub.edu/uploads/Assessing_What_Really_Matters_To_Student_Learning_(Kuh,%202001).pdf)
- Kuh, G. D. (2003). What we're learning about student engagement from NSSE. *Change*, 35(2), 24-32. Retrieved from [http://cpr.iub.edu/uploads/Kuh%20\(2003\)%20What%20We're%20Learning%20About%20Student%20Engagement%20From%20NSSE.pdf](http://cpr.iub.edu/uploads/Kuh%20(2003)%20What%20We're%20Learning%20About%20Student%20Engagement%20From%20NSSE.pdf)
- Kuh, G. D. (2008). *High-impact educational practices: What they are, who has access to them, and why they matter*. Washington, DC: Association of American Colleges and Universities.
- Kuh, G. D. (2009). What student affairs professionals need to know about student engagement *Journal of College Student Development*, 50(6) 683-706. doi:10.1353/csd.0.0099
- Kuh, G. D., & Hu, S. (2001). The effects of student-faculty interaction in the 1990's. *The Review of Higher Education*, 24(3), 309-332. doi:10.1353/rhe.2001.0005
- Kuh, G. D., Cruce, T. M., Shroup, R., & Kinzie, J. (2008). Unmasking the effects of student engagement on first-year college grades and persistence. *Journal of Higher Education*, 79(5), 540-56. doi:10.1353/jhe.0.0019
- Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2006). *What matters to student success: A review of the literature*. National Postsecondary Education Cooperative (NPEC Commissioned Paper). Retrieved from http://nces.ed.gov/npec/pdf/Kuh_Team_ExecSumm.pdf
- Kuh, G. D., Kinzie, J., Buckley, J. A., Bridges, B. K., & Hayek, J. C. (2007). *Piecing together the student success Puzzle research, propositions and recommendations* (ASHE Higher

Factors and experiences related to academic success

- Education Report Series No. 32-5). San Francisco: Jossey-Bass. Retrieved from www.interscience.wiley.com
- Kuh, G. D., Kinzie, J., Schuh, J. H., Whitt, E. J., & Associates. (2005). *Student success in college: Creating conditions that matter*. San Francisco, CA: Jossey-Bass.
- Kusurkar, R. A., Ten Cate, T. J., Vos, C. M. P., Westers, P., & Croiset, G. (2012). How motivation affects academic performance: A structural equation modelling analysis. *Advances in Health Science Education, 18*(1). doi:10.1007/s10459-012-9354-3
- Kwesiga, C. J. (2002). *Women's access to higher education in Africa: Uganda's experience*. Kampala, Uganda: Fountain.
- Landin, M., & Perez, J. (2015). Class attendance and academic achievement of pharmacy students in a European University. *Currents in Pharmacy Teaching and Learning, 7*(1), 78-83. doi:10.1016/j.cptl.2014.09.013
- Lange, L. (2006). Symbolic policy and 'performativity': South African higher education between the devil and the deep blue sea. In Council on Higher Education (Ed.), *Kagisano: Ten Years of Higher Education under Democracy, 4*, 39-53. Retrieved from <http://www.che.ac.za/documents/d000128/>
- Larimore, J. A., & McClellan, G. S. (2005). Native American student retention in U.S. postsecondary education. *New Directions for Student Services, 2005*(109), 17-32. doi:10.1002/ss.150
- Latino, J. A., & Unite, C. M. (2012). Providing peer academic support through peer education. In J. R. Keup (Ed.), *Peer leadership in higher education: New directions for higher education* (pp. 31-44). San Francisco, CA: Jossey-Bass.
- Lau, K. L. & Chan, D. W. (2001). Motivational characteristics of under-achievers in Hong Kong. *Educational Psychology, 21*(4), 417-430. doi:10.1080/01443410120090803
- Lau, L. K. 2003. Institutional factors affecting student retention. *Education, 124*(1). Retrieved from <http://web17.epnet.com?DeliveryPrintSave.asp>.

- Lawal, M. (2009). Reconciling methodological approaches of survey and focus group. *Nurse Researcher*, 17(1), 54-61. Retrieved from http://www.research.uwl.ac.uk/staffprofiles/view_profile.aspx?email=Muil.Lawal@uwl.ac.ukdoi.
- Lazer, S., Mazzeo, J., Twing, J. S., Way, W. D., Camara, W., Sweeney, K. (2010). *Educational testing services thoughts on an assessment of common core standards*. Retrieved from http://images.pearsonassessments.com/images/tmrs/tmrs_rg/ThoughtonaCommonCoreAssessmentSystem.pdf
- Ledman, R. E., & Kamuche, F. (2002). Improving student attendance: Does it improve student learning? *Academic Exchange Quarterly*, 7(3), 76-79. Retrieved from [http://www.thefreelibrary.com/Improving+student+attendance%3A+does+it+improve+student+learning%3F+\(The...-a085916961](http://www.thefreelibrary.com/Improving+student+attendance%3A+does+it+improve+student+learning%3F+(The...-a085916961)
- Legotlo, M. W., Maaga, M. P., Sebego, M. G., Van der Westhuizen, P. G., Mosoge, M. J., Nieuwoudt, H. D., & Steyn, H. D. (2002). Perceptions of stakeholders on poor performance in Grade 12 in a province in South Africa. *South African Journal of Education*, 22(2), 113-118. Retrieved from https://www.google.co.za/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&ved=0CC0QFjAA&url=http%3A%2F%2Fwww.ajol.info%2Findex.php%2Fsaje%2Farticle%2Fdownload%2F24883%2F20560&ei=8hhHUcP0GoKw7AbfwoCwDQ&usg=AFQjCNGZobmNpjeT-W9LUth_HlrVhYRztg&bvm=bv.43828540,d.d2k
- Lehr, C. A., Johnson, D. R., Bremer, C. D., Cosio, A., & Thompson, M. (2004). *Increasing rates of school completion: Moving from policy and research to practice. A manual for policymakers, administrators, and educators*. Minneapolis, MN: Institute on Community Integration Publications Office.
- Leibowitz, B. (2005). Learning in an additional language in a multilingual society: A South African case study on university-level writing. *TESOL Quarterly*, 39(4), 661-681. doi:10.2307/3588526
- Leibowitz, B., Van der Merwe, A., & Van Schalkwyk, S. (Eds.). (2009). *Focus on first-year success. Perspectives emerging from South Africa and beyond*. Stellenbosch: Sun Media.

- Leka, I. (2015). The impact of peer relations in the academic process among adolescents. *Mediterranean Journal of Social Sciences*, 6(1), 127-132. doi:10.5901/mjss.2015.v6n1s1p127
- Lemmens, J. (2005). *Metakognisie, intrinsieke prestasiemotivering en kritiese denke as correlate van akademiese sukses onder eerstejaar sielkundestudente* (Unpublished master's thesis). University of Pretoria, Pretoria, South Africa.
- Lemmens, J. (2010). *Students' readiness for university education* (Unpublished doctoral dissertation). University of Pretoria, Pretoria, South Africa.
- Leonard, D. K., & Jiang, J. (1999). Gender bias and the college predictors of the SAT's: A cry of despair. *Research in Higher Education*, 40(4), 375-407. doi:10.1023/A:1018759308259
- Leppel, K. (2001). The impact of major on college persistence among freshmen. *Higher Education*, 41(3), 327-342. Retrieved from <http://www.jstor.org/stable/3447979>
- Leppel, K. (2002). Similarities and differences in the college persistence of men and women. *The Review of Higher Education*, 25(4), 433-450. doi:10.1353/rhe.2002.0021.
- Letseka, M. & Breier, M. (2008). Student poverty in higher education: The impact of higher education dropout on poverty. In S. Maile (Ed). *Education and poverty reduction strategies: Issues of policy coherence (Colloquium Proceedings)*. Pretoria, South Africa: HSRC Press.
- Letseka, M., & Maile, S. (2008). *High university dropout rates, a threat to South Africa's future: (HSRC Policy Brief)*. Retrieved from <http://www.hsrc.ac.za/en/research-data/view/4274>
- Letseka, M., Breier, M., & Visser, M. (2009). Poverty, race and student achievement in seven higher education institutions. In M. Letseka, M. Cosser, M. Breier, & M. Visser (Eds.), *Student retention and graduate destination: Higher education and labour market access and success* (pp. 25-40). Cape Town, South Africa: HSRC Press.

- Letseka, M., Cosser, M. Breier, M., & Visser, M. (2010). *Student retention and graduate destination: Higher education & labour market access & success*. HSRC Press: Cape Town.
- Linver, M. R., Davis-Kean, P. E., & Eccles, G. S. (2002). *Influences of gender on academic achievement*. Paper presented at the biennial meetings of the Society for Research on Adolescence, New Orleans, LA. Abstract retrieved from <http://www.hsrc.ac.za/en/research-data/mtree-doc/11601>
- Litosseliti, L. (2007). *Using focus groups in research*. New York, NY: Continuum.
- Locke, E. A. (1968). Toward a theory of task motivation and incentives. *Organizational Behavior and Human Performance*, 3(2), 157-189. doi:10.1016/0030-5073(68)90004-4
- López, T., Ruth, N., & Wodtke, G. (2010). College residence and academic performance: Who benefits from living on campus? *Urban Education*, 45(4), 506-532. doi:10.1177/0042085910372351
- Lotkowski, V. A., Robbins, S. B., & Noeth, R. J. (2004). *The role of academic and non-academic factors in improving college retention* (ACT policy report). Retrieved from ACT website: <http://www.act.org/research/policy/index/html>
- Lourens, E., Fourie, M., & Mduetshekelwa, N. (2014, August). *Understanding the experiences of educationally disadvantaged students in higher education*. Paper presented in Track 5 at the EAIR 36th Annual Forum in Essen, Germany.
- Louw, A. J. N. (2005). *Staking van studies aan landbou-opleidingsinstellings in die Wes-Kaap: Waarskynlike oorsake en moontlike strategieë vir studente-ondersteuning* (Unpublished doctoral dissertation). Stellenbosch University, Stellenbosch, South Africa.
- Louwrens, L. (2003). *Moedertaalonderrig as moderator by die verband tussen intelligensiekwasiënt en akademiese prestasie* (Unpublished master's thesis). University of the Free State, Bloemfontein, South Africa.
- Lubben, F., Davidowitz, B., Buffler, A., Allie, S., & Scott, I. (2010). Factors influencing access students' persistence in an undergraduate science program: A South African case

- study. *International Journal of Educational Development*, 30(4), 351–358. doi:10.1016/j.ijedudev.2009.11.009
- Lüftenegger, M., Klug, J., Harrer, K., Langer, M., Spiel, C., & Schober, B. (2016). Students' achievement goals, learning-related emotions and academic achievement. *Frontiers in Psychology*, 7(603). doi:10.3389/fpsyg.2016.00603
- Lumley, S., Ward, P., Roberts, L., & Mann, J. P. (2015). Self-reported extracurricular activity, academic success, and quality of life in UK medical students. *International Journal of Medication Education*, 2015(6), 111–117. doi:10.5116/ijme.55f8.5f04
- Lundberg, C. A. (2003). The influence of time limitations, faculty, and peer relationships on adult student learning: A causal model. *Journal of Higher Education*, 74(6), 665–688. doi:10.1353/jhe.2003.0045.
- MacGregor, K. (2007, October 28). Student dropout rates alarming. *University World News*. Retrieved from <http://www.universityworldnews.com/article.php?story=20071025102245380>
- Mackintosh, N. J. (1998) Reply to Lynn, *Journal of Biosocial Sciences*, 30(4), 533-539. doi:10.1017/S0021932098005331
- Macnee, C. L., & McCabe, S. (2nd ed.). (2008). *Understanding nursing research*. Philadelphia, PA: Lippincott Williams & Wilkins.
- Madhav, N., Joseph, M. K., & Twala, B. (2015, June). *Creating social learning spaces to enhance the learning experience*. Paper presented at the 3rd Biennial SASEE Conference on Electrical Engineering Technology, Durban, South Africa. Retrieved from <http://ujdigispace.uj.ac.za/bitstream/handle/10210/14187/Madhav,%20N.,%20Joseph,%20M.%20K.%20%26%20Twala,%20B.%202015.pdf?sequence=1&isAllowed=y>
- Makgalemele, M. (2005). *The impact of English second language proficiency on the academic performance of educator trainees in the Faculty of Health and Social Sciences at Technikon Northern Gauteng* (Unpublished master's thesis). Tshwane University of Technology, Pretoria, South Africa.

Factors and experiences related to academic success

- Malefo, V. (2000). Psycho-social factors and academic performance among African women students at a predominantly white university in South Africa. *South African Journal of Psychology*, 30(4), 40-45. Retrieved from <http://hdl.handle.net/10520/EJC98097>
- Manan, A. (2007). Student attrition and social and academic integration: Application of Tinto's model at the University of Papua New Guinea. *Higher Education* 53(2007), 147-165. doi:1007/s10734-005-2496-y
- Manfreda, K. L., Bosnjak, M., Berzelak, J., Haas, I., & Vehovar, V. (2008). Web surveys versus other survey modes: A meta-analysis comparing response rates. *International Journal of Market Research*, 50(1), 79-104. Retrieved from https://www.mrs.org.uk/ijmr_article/article/87205
- Manik, S. (2014). Shifting the discourse: Student departure in the context of relative deprivations. *South African Journal of Higher Education*, 28(1), 148-163. Retrieved from http://reference.sabinet.co.za/webx/access/electronic_journals/high/high_v28_n1_a10.pdf
- Mapuranga, B., Musingafi, C. C. M., & Zebron, S. (2015). Students perceptions on factors that affect their academic performance: The case of Great Zimbabwe University (GZU). *Journal of Education and Practice*, 6(1), 1-5. Retrieved from https://www.academia.edu/15218695/Students_Perceptions_on_Factors_that_affect_their_Academic_Performance_The_Case_of_Great_Zimbabwe_University_GZU
- Maree, K. (2009). *First steps in research*. Pretoria, South Africa: Van Schaik.
- Marshal, J., Adams, M., Cameron, A., & Sullivan, G. (2000). Academics' perceptions of their professional development needs related to leadership and management: What can we learn? *International Journal of Academic Development*, 5(1), 42-53. doi:10.1080/136014400410097
- Martinez, M. D. (2003). Missing in action: Reconstructing hope and possibility among Latino students placed at risk. *Journal of Latinos and Education*, 2(1), 13-21. doi:http://dx.doi.org/10.1207/S1532771XJLE0201_3
- Martinez, M., & Klopott, S. (2003). *Improving college access for minority, low-income, and first-generation students*. Boston, MA: Pathways to College Network.

Factors and experiences related to academic success

- Marzano, R. J. (2000). *Analyzing two assumptions underlying the scoring of classroom assessments*. Aurora, CO: Mid-continent Research for Education and Learning.
- Maxwell, J. A. (2013). *Qualitative research design. An interactive approach* (3rd ed.). Thousand Oaks, CA: Sage.
- Mbara, T. C., Celliers, C., (2013). 'Travel patterns and challenges experienced by University of Johannesburg off-campus students'. *Journal of Transport and Supply Chain Management* 7(1), 8. doi:<http://dx.doi.org/10.4102/jtscm.v7i1.114>
- McCabe, R. (2003). *Yes, we can! A community college guide for developing America's underprepared*. Phoenix, AZ: Leagu.
- McCoach, D. B., & Siegle, D. (2001). A comparison of high achievers' and low achievers' attitudes, perceptions and motivations. *Academic Exchange Quarterly*, 5(2), 71-76. Retrieved from <https://www.questia.com/library/journal/1G1-76770274/a-comparison-of-high-achievers-and-low-achievers>
- McCoach, D. B., Siegle, D. (2003). The structure and function of academic self-concept in gifted and general education students. *Roeper Review*, 25(2), 61-66. doi:10.1080/02783190309554200
- McCormick, M. (2011). *A study of factors related to success for nontraditional versus traditional aged students at a public urban community college* (Unpublished master's thesis). The Graduate College at the University of Nebraska, Lincoln, NE.
- McGhie, V. F. (2012). *Factors impacting on first-year students' academic progress at a South African university* (Doctoral dissertation). Stellenbosch University, Stellenbosch, South Africa.
- McInnis, C., James, R., & Hartley, R. (2000). *Trends in the first-year experience: In Australian universities*. Canberra, Australia: DETYA Higher Education Division. Retrieved from http://www.dest.gov.au/archive/highered/eippubs/eip00_6/fye.pdf
- McKenzie, K., & Schweitzer, R. (2001). Who succeeds at university? Factors predicting university performance in first year Australian university students. *Higher Education*

Research and Development, 20(1), 21-33. Retrieved from <http://dx.doi.org/10.1080/07924360120043621>

McNabb, R., Sarmistha, P., & Sloane, P. (2002). Gender Differences in Student Attainment: The Case of University Students in the UK, *Economica*, 69(275), 481-503. doi:10.1111/1468-0335.00295

McNulty, K. L. A. (2014). *Adjustment to college among lower division students with disabilities: An exploratory study* (Unpublished doctoral thesis). Portland State University, Portland, OR.

Mdyogolo, W. (2012). *The academic experiences of Faculty of Education postgraduate students who have dropped out of a higher education institution in Eastern Cape Province* (Unpublished master's thesis). University of Fort Hare, East London, South Africa.

Mentz, M. (2012). *Measuring and using pre-university levels of student engagement at a South African university of the Free State* (Unpublished doctoral dissertation). University of the Free State, Bloemfontein, South Africa.

Merritt, D. L., & Buboltz, W. (2015). Academic Success in College: Socioeconomic Status and Parental Influence as Predictors of Outcome. *Open Journal of Social Sciences*, 3(5), 127-135. doi:<http://dx.doi.org/10.4236/jss.2015.35018>

Michel, S. D. (2016). *Cross-cultural mentoring relationships between faculty and students in undergraduate athletic training programs* (Unpublished doctoral dissertation). Western Michigan University, Kalamazoo:MI.

Michie, F., Glachan, M., & Bray, D. (2001). An evaluation of factors influencing the academic self-concept, self-esteem and academic stress for direct and re-entry students in higher education. *Educational Psychology*, 21(4), 455-472. doi:10.1080/01443410120090830

Milem, J. F., & Berger, J. B. (1997). A modified model of college student persistence: The relationship between Astin's theory of involvement and Tinto's theory of student departure. *Journal of College Student Development*, 38(4), 387-400. Retrieved from http://works.bepress.com/joseph_berger/31/

- Milem, J. F., Umbach, P. D., & Liang, C. T. H. (2004). Exploring the perpetuation hypothesis: The role of colleges and universities in desegregating society. *Journal of College Student Development, 45*(6), 688-700. doi:10.1353/csd.2004.0070
- Miller Brown, S. (2002). Strategies that contribute to nontraditional/adult student development and persistence. *PAACE Journal of Lifelong Learning, 11*, 67-76. doi:https://www.researchgate.net/publication/251337142_Strategies_that_Contribute_to_NontraditionalAdult_Student_Development_and_Persistence
- Minister of Education. (2013). *Background to the national quintile system*. [Media Release]. Retrieved from http://wced.school.za/comms/press/2013/74_14oct.html
- Mlambo, V. (2011). An analysis of some factors affecting student academic performance in an introductory biochemistry course at the University of the West Indies. *Caribbean Teaching Scholar, 1*(2), 79-92. doi:https://www.researchgate.net/profile/Victor_Mlambo/publication/233776350_An_analysis_of_some_factors_affecting_student_academic_performance_in_an_introduutory_biochemistry_course_at_the_University_of_the_West_Indies/links/0c96052b48d3190d55000000.pdf
- Moja, T., Schreiber, B., & Luescher-Mamashela, T. (2014). Contextualising student affairs in Africa: The past, present and future. *Journal of Student Affairs in Africa, 2*(1), 1-8 doi:10.14426/jsaa.v2i1.46
- Mokhaba, M. B. (2005). *Outcomes-based education in South Africa since 1994: Policy objectives and implementation complexities* (Unpublished doctoral dissertation). University of Pretoria, Pretoria, South Africa.
- Montgomery, D. C., Peck, E. A., & Vining, G. G. (2001). Introduction to linear regression analysis. *Technometrics, 49*(2), 232-233. doi:10.1198/tech.2007.s499
- Mooloo, P. (2014). *The effect of mothers' studying on family life: A case study* (Unpublished master's thesis). University of Pretoria, Pretoria, South Africa.
- Moore, R., Jensen, M., Hatch, J., Durnaczyk, I., Staats, S., & Koch, L. (2003). Showing up: The importance of class attendance for academic success in introductory Science courses. *The American Biology Teacher, 65*(5), 325-329. doi:10.1662/00027685(2003)065[0325:SUTIOC]2.0.CO;2

Factors and experiences related to academic success

- Moos, A. (2009). *First-year students' perceptions of the influence of social integration on academic performance* (Unpublished master's thesis). University of the Western Cape, Bellville, South Africa.
- Mora, T., & Escardibul, J. O. (2008). Schooling effects on undergraduate performance: evidence from the University of Barcelona. *Higher Education*, 56(5), 519-532. doi:10.1007/s10734-007-9108-y
- Morris, J. (2002). *Academic integration, social integration, goal and institutional commitment, and spiritual integration as predictors of persistence at a Christian institution of higher education* (Unpublished doctoral dissertation). Texas Tech University, Texas, TX.
- Mouton, N., Louw, G. P., & Strydom, G. L. (2013). Present-day dilemmas and challenges of the South African tertiary system. *International Business & Economics Research Journal*, 12(3), 285-300. Retrieved from <http://www.cluteinstitute.com>
- Mudhovozi, P. (2014). Mapping the misunderstood non-traditional male college students. *Journal of Social Science*, 41(3), 471-480. Retrieved from [http://www.krepublishers.com/02-Journals/JSS/JSS-41-0-000-14-Web/JSS-41-3-14-Abst-PDF/JSS-41-3-471-14-1545-Mudhovozi-P-C/JSS-41-3-471-14-1545-Mudhovozi-P-C-Ab\[18\].pmd.pdf](http://www.krepublishers.com/02-Journals/JSS/JSS-41-0-000-14-Web/JSS-41-3-14-Abst-PDF/JSS-41-3-471-14-1545-Mudhovozi-P-C/JSS-41-3-471-14-1545-Mudhovozi-P-C-Ab[18].pmd.pdf)
- Murray, C., & Malmgren, K. (2005). Implementing a teacher-student relationship program in a high-poverty urban school: Effects on social, emotional, and academic adjustment and lessons learned. *Journal of School Psychology*, 43(2), 137-152. doi:10.1016/j.jsp.2005.01.003
- Murray, M. (2014). Factors affecting graduation and student dropout rates at the University of KwaZulu-Natal. *South African Journal of Science*, 110(11/12), 1-6. doi:<http://dx.doi.org/10.1590/sajs.2014/20140008>
- Naidoo, A., & Lemmens, J. (2015). Faculty intervention as support for first-year students, *Journal of Student Affairs in Africa*, 3(2), 17-32. doi:10.14426/jsaa.v3i2.133
- Nasrullah, S., & Khan, M. S. (2015). The impact of time management on the students' academic achievements. *Journal of Literature, Languages and Linguistics*, 11, 66-71. <http://www.iiste.org/Journals/index.php/JLLL/article/viewFile/23538/23819>

- Naudé, L., Jansen, J. V., Greyling, W., & Esterhuysen, G. K. (2011). Die rol van taalvaardigheid in die verband tussen matriek- en universiteitsprestasie van swart eerstejaarstudente. *Journal for Language Teaching (SAALT Journal for Language Teaching)*, 45(1), 116-130. Retrieved from <http://hdl.handle.net/10520/EJC59997>
- Ncgobo, S. (2009). Lecturers' and students' reflections on a bilingual program. In B. Leibowitz, A. van der Merwe, S. van Schalkwyk (Eds.), *Focus on first-year success: perspectives emerging from South Africa and beyond* (pp. 209-225). Stellenbosch, South Africa: Sun Media.
- Nel, C., Troskie-De Bruin, C., & Bitzer, E. (2009). Students' transition from school to university: Possibilities for a pre-university intervention. *South African Journal of Higher Education*, 23(5), 974-991 Retrieved from www.sajhe.org
- Neto, M. (2015). Educational motivation meets Maslow: Self-actualisation as contextual drive. *Journal of Student Engagement: Education matters*, 5(1), 18–27. Retrieved from <http://ro.uow.edu.au/cgi/viewcontent.cgi?article=1037&context=jseem>
- Neuman, W. L. (2011). *Social research methods: qualitative and quantitative approaches* (7th ed.). Boston, MA: Pearson Education.
- Newman-Ford, L., Lloyd, S., & Thomas, S. (2009). An investigation of the effects of gender, prior academic achievement, place of residence, age and attendance on first-year undergraduate attainment. *Journal of Applied Research in Higher Education*, 1(1), 13-28. doi:<http://dx.doi.org/10.1108/17581184200800002>
- Ngidi, D. P. (2007). Students' and lecturers' perceptions of some factors influencing students' academic success or failure at a historically black university in South Africa. *South African Journal of Higher Education*, 21(4), 717-732. Retrieved from <http://www.ajol.info/index.php/sajhe/issue/view/3432>
- Nicpon, M., Huser, L., Blanks, E., Sollenberger, S., Befort, C., & Kurpius, S. (2007). The relationship of loneliness and social support with college freshmen's academic performance and persistence. *Journal of College Student Retention: Research, Theory & Practice*, 8(3), 345-358. doi:10.2190/A465-356M-7652-783R

Factors and experiences related to academic success

- Nonis, S. A., & Hudson, G. I. (2006). Academic performance of college students: Influence of time spent studying and working. *Journal of Education for Business, 81*(3), 151-159. doi:10.3200/JOEB.81.3.151-159
- Nora, A., Barlow, E., & Crisp, G. (2005). Student persistence and degree attainment beyond the first year in college. In A. Seidman (Ed.), *College student retention: Formula for student success* (pp. 129-153). Westport, CT: Prager.
- Nulty, D. D. (2008). The adequacy of response rates to online and paper surveys: What can be done? *Assessment and Evaluation in Higher Education, 33*(3): 301-314. doi:10.1080/02602930701293231
- Nusche, D. (2008). *Assessment of learning outcomes in higher education: A comparative review of selected practices* (OECD education working paper no. 15). Retrieved from www.oecd.org/edu/skills-beyond-school/40256023.pdf
- Nyamapfene, A. (2010). Does class attendance still matter? *Engineering Education: Journal of the Higher Education Academy Engineering Subject Centre, 5*(1). Retrieved from <http://www.heacademy.ac.uk/resources/detail/subjects/engineering/vol5-issue1-nyamapfene>
- O'Brien, C. (2004). *Indicators of opportunity in higher education* (Fall 2004 Status Report). Washington, DC: Pell Institute.
- O'Brien, C., & Shedd, J. (2001). *Getting through college: Voices of low income and minority students in New England*. New England, MA: Institute for Higher Education Policy.
- Ogbu, J. (1986). The consequences of the American caste system. *The school achievement of minority children: New perspectives* (pp. 19-56). Hillsdale, NJ: Lawrence Erlbaum.
- Ogbu, J. (1990). Understanding cultural diversity: Summary comments. *Education and Urban Society, 22*(4), 425-429.
- Ogude, N., Kilfoil, W., & Du Plessis, G. (2012). An institutional model for improving student retention and success at the University of Pretoria. *The International Journal of the First Year in Higher Education, 3*(1), 21-34. doi:10.5204/intjfyhe.v3i1.97

- Okorie, E. U., & Ezeh, D. N. (2016). Influence of gender and location on students' achievement in chemical bonding. *Mediterranean Journal of Social Sciences*, 7(3), 309-318. doi:10.5901/mjss.2016.v7n3p309
- Olani, A. (2009). Predicting first year university students' academic success. *Electronic Journal of Research in Education Psychology*, 7(3), 1053-1072. Retrieved from https://www.researchgate.net/publication/279712110_Predicting_first_year_university_students'_academic_success
- Olson, K. J. (2014). Development and initial validation of a measure of work, family, and school conflict. *Journal of Occupational Health Psychology*, 19(1), 46-59. doi:10.1037/a0034927
- Onete, O. U., Edet, P. B., Udey, F. U., & Ogbor, B. P. (2012). Academic performance: A function of achievement motivation among Education students of Cross River University of Technology, Calabar. *Review of Higher Education*, 4, 63-83. Retrieved from <http://bit.ly/2hkcVxS>
- Onwuegbuzie, A. J. & Johnson, R. B. (2006). The validity issue in mixed method research. *Research in the Schools*, 13(1), 48-63. Retrieved from http://videlectures.net/site/normal_dl/tag=48066/MixedMethodsandValidity.RITS.pdf
- Onwuegbuzie, A. J. & Leech, N. L. (2005). Taking the 'Q' out of research: Teaching research methodology courses without the divide between quantitative and qualitative paradigms. *Quality & Quantity* 39(3), 267-296. doi:10.1007/s11135-004-1670-0
- Onwuegbuzie, A. J., Dickinson, W. B., Leech, N. L., & Zoran, A. G. (2009). A qualitative framework for collecting and analyzing data in focus group research. *International Journal of Qualitative Research* 8(3) 1-2. doi:10.1177/160940690900800301
- Organisation for Economic Co-operation and Development (OECD). (2008). *Reviews of National Policies for Education: South Africa*. OECD Publishing. Retrieved from <http://bit.ly/2haDMcH>
- Osterman, K. F. (2000). Students' need for belonging in the school community. *Review of Educational Research*, 70(3), 323-367. doi:10.3102/00346543070003323

- Pallant, J. (2013). *SPSS Survival Manual. A step by step guide to data analysis using IBM SPSS*. (5th ed.). McGraw Hill: Berkshire, United Kingdom.
- Panayides, P. (2013). Coefficient alpha: Interpret with caution. *Europe's Journal of Psychology*, 9(4), 687-696. doi:10.5964/ejop.v9i4.653
- Paras, J. (2001). Crisis in mathematics education. Student failure: Challenges and possibilities. *South African Journal of Higher Education*, 15(3), 66-73. Retrieved from http://www.sabinet.co.za/abstracts/high/high_v15_n3_a10.html
- Parikh, M. (2008). *The relationship between student engagement and academic performance: An exploration of the paradox of international undergraduates* (Unpublished doctoral dissertation). State University of New York, Buffalo, NY.
- Pascarella, E. T. (2001). Cognitive growth in college: Surprising and reassuring findings. *Change*, 33(6), 20-27. doi:10.1080/0009138010960182
- Pascarella, E. T., & Terenzini, P. T. (1980). Toward the validation of Tinto's model of college student attrition: A review of recent studies. *Research in Higher Education*, 12(3), 271-282. doi:10.1007/BF00976097
- Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students: Findings and insights from twenty years of research* (Vol 1). San Francisco, CA: Jossey-Bass.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students: A third decade of research* (Vol. 2). San Francisco: Jossey-Bass.
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., and Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes [Electronic version]. *The Journal of Higher Education*, 75(3), 249-284. Retrieved from <http://www.jstor.org/stable/3838816>
- Pather, S., & Chetty, R. (2015). A conceptual framework for understanding pre-entry factors influencing first-year university experience. *South African Journal of Higher Education*, 30(1), 1-21. Retrieved from <http://dx.doi.org/10.20853/30-1-548>
- Patton, M. (2002). *Qualitative evaluation and research methods*. Beverly Hills, CA: Sage.

Factors and experiences related to academic success

- Paulsen, M. B., & St John, E. P. (1997). The financial nexus between college choice and persistence. *New Directions for Institutional Research*, 95, 65-82. doi:10.1002/ir.9504
- Paulsen, M. B., & St John, E. P. (2002). Social class and college costs: Examining the financial nexus between college choice and persistence. *Journal of Higher Education*, 73(2), 189-236. Retrieved from <http://www.jstor.org/pss/1558410>
- Pell Institute for the Study of Opportunity in Higher Education. (2015). *Indicators of higher education equity in the United States (45-year Trend Report 2015 Revised Edition)*. Retrieved from http://www.pellinstitute.org/downloads/publications-Indicators_of_Higher_Education_Equity_in_the_US_45_Year_Trend_Report.pdf
- Perger, M., & Takács, I. (2016). Factors contributing to students' academic success based on the students' opinion at BME Faculty of Economic and Social Sciences. *Periodica Polytechnica Social and Management Sciences*, 24(2), 119-135. doi:10.3311/PPso.8843
- Perry, A. L., & Perry, L. G. (2015). Final-year transition and service-learning: Working together as a vehicle for student engagement, development, and life preparedness. *International Journal of Research on Service-Learning and Community Engagement*, 3(1). Retrieved from <http://journals.sfu.ca/iarslce/index.php/journal/article/download/153/82>
- Piaget, J. (1971). *Science of education and the psychology of the child*. Orion, NY: Penguin Books
- Pickworth, G. E., Snyman, W. D., White, J. G., & Beukes, S. J. (2005). The dilemma of student attendance of learning opportunities. *South African Dental Journal*, 60(2), 73-77.
- Pike, G. R., & Kuh, G. D. (2005). First and second generation college students: A comparison of their engagement and intellectual development. *Journal of Higher Education*, 76(3), 276-300. Retrieved from <http://bit.ly/2h9HKVq>
- Pike, G. R., & Saupe, J. (2002). Does high school matter: An analysis of 3 methods of predicting first-year grades. *Research in Higher Education*, 43(2), 187-207. doi:0361-0365/02/0400-0187/0.

- Pike, G. R., Kuh, G. D., & Massa-McKinley, R. (2008). First-year student's employment, engagement and academic achievement: Untangling the relationship between work and grades. *NASPA Journal*, 45(4), 560-582. Retrieved from <http://journals.naspa.org/jsarp/vol45/iss4/art6/>
- Pillay, A., & Ngcobo, H. (2010). Sources of stress and support among rural-based first-year students: an exploratory study. *South African Journal of Psychology*, 40(3), 234-240. doi:10.1177/008124631004000302
- Pillay, S., & Maharaj, A. (2014). Collaborative learning of mathematics by educationally disadvantaged students at a university *The Independent Journal of Teaching and Learning*, 6(1), 55-68. Retrieved from <http://hdl.handle.net/10520/EJC131363>
- Pinto, M. B., Parente, D. H., & Palmer, T. S. (2001). College student performance and credit card usage. *Journal of College Student Development*, 42(1), 49-58.
- Pintrich, P. R., & Schunk, D. H. (2002). *Motivation in education: theory, research and application*. New Jersey, NJ: Pearson Education.
- Pitkethly, A. & Prosser, M. (2001). The first-year experience project: A model for university-wide change. *Higher Education Research & Development*, 20(2), 185-198. doi:10.1080/07294360120064420.
- Pitoniak, M. J., & Yeld, N. (2013). Standard setting lessons learned in the South African context: Implications for international implementation. *International Journal of Testing*, 13(1), 19-31. doi:10.1080/15305058.2012.741085
- Plug, C., Louw, D. A. P., Gouws, L. A., & Meyer, W. F. (2007). *Verklarende en vertalende sielkundewoordeboek*. Johannesburg, South Africa: Heinemann.
- Potgieter, M. (2010, October). *Conceptual gain in Chemistry: Is the gap addressed sufficiently?* Paper presented at the STEM, Mind the Gap Conference, Cape Town, South Africa.
- Potgieter, M., Davidowitz, B., & Mathabatha, S. S. (2008). Preparedness for tertiary chemistry: Issues of placement and performance of academic performance programs. *South African Journal of Higher Education*, 22(4), 861-876. doi:10.1039/C1RP90024B

Factors and experiences related to academic success

- Pretorius, E. J. (2007). Looking into the seeds of time: Developing academic literacy in high poverty schools, *Ensovoort*, 11(2), 105-125.
- Pring, R. 2004. *Philosophy of educational research* (2nd ed.). London, United Kingdom: Continuum.
- Punch, K. F. (2005). *Introduction to social research. Quantitative and qualitative approaches*. (2nd ed.). London, United Kingdom: Sage.
- Purdie, J. R. (2007). *Examining the academic performance and retention of first-year students in living-learning communities, freshmen interest groups and first year experience courses* (Doctoral dissertation). University of Missouri, Columbia. Retrieved from <http://edt.missouri.edu/Winter2007/Dissertation/PurdieJ-050407-D6618/research.pdf>
- Rabourn, K. E., Shoup, R., & BrckaLorenz, A. (2015, May). *Barriers in returning to learning: engagement and support of adult learners*. Paper presented at the Annual Forum of the Association for Institutional Research, Denver, Colorado. Abstract retrieved from http://nsse.indiana.edu/pdf/presentations/2015/AIR_2015_Rabourn_et_al_paper.pdf
- Rand, J. (2016). *Student Involvement theory - A way we might design for learning at York St John*. Unpublished manuscript, School of Education, York St John University, York, United Kingdom.
- Rautopuro, J., & Vaisanen, P. (2001, September). *Non-traditional students at university: A follow-up study for young and adult students' orientations, satisfaction and learning outcomes*. Paper presented at the European Conference on Educational Research, Lille, France.
- Reason, R. (2009). An examination of persistence research through the lens of a comprehensive conceptual framework. *Journal of College Student Development*, 50(6), 658-682. doi:10.1353/csd.0.0098
- Reason, R. D., Terenzini, P. T., & Domingo, R. J. (2005, May). *First things first: Developing academic competence in the first year of college*. Paper presented at the annual meeting of the Association for Institutional Research, San Diego, CA.

- Reed, J. J. (2015). *Mutually beneficial interactions: campus custodian-college student relationships* (Unpublished doctoral thesis). The University of Iowa, Iowa, IW.
- Reynolds, W. M. (1988). Measurement of academic self-concept in college students. *Journal of Personality Assessment*, 52(2), 223-240. Retrieved from <http://web.ebscohost.com.wagtail.ufs.ac.za/ehost/pdfviewer/pdfviewer?sid=3c92bc97-d3f0-4145-8192-5ffdf302bffa%40sessionmgr12&vid=4&hid=12>
- Rhodes, A. K. (2008). *Predictors of early academic success and program completion among baccalaureate nursing students*. Ann Arbor, MI: ProQuest LLC.
- Rhodes, C., & Nevill, A. (2004). Academic and social integration in higher education: A survey of satisfaction and dissatisfaction within a first-year education studies cohort at a new university. *Journal of Further and Higher Education*, 28(2), 179-193. doi:10.1080/0309877042000206741
- Rintala, U., & Kairamo, A. K. (Eds.). (2011). *WP8 student retention. A literature review carried out in the framework of the ATTRACT project*. Retrieved from ATTRACT Project website: http://www.attractproject.org/sites/default/files/document/WP8_literature%review_2011
- Ritchie, J., Lewis, J., Elam, G., Tennant, R., & Rahim, N. (2014). Designing and selecting samples. In J. Ritchie, J. Lewis, C. McNaughton Nicholls, & R. Ormston (Eds.), *Qualitative research practice: A guide for Social Science students & researchers* (pp. 111-146). London, United Kingdom: Sage.
- Robbins, S. B., Lauver, K., Le, H., Davis, D., Langley, R., & Carlstrom, A. (2004). Do psychosocial and study skill factors predict college outcomes? A meta-analysis. *Psychological Bulletin*, 130(2), 261-288. doi:10.1037/0033-2909.130.2.261.
- Roberts, J., & McNeese, M. N. (2010). Student involvement/engagement in higher education based on students' origin. *Research on Higher Education Journal*, 7(May Issue). Retrieved from <http://www.aabri.com/manuscripts/09346.pdf>
- Roberts, J., & Styron, R. (2011). Student satisfaction and persistence: Factors vital to student retention. *Research in Higher Education*, 6(3), 1-18. Retrieved from <http://www.aabri.com/manuscripts/09321.pdf>.

Factors and experiences related to academic success

- Robertson, C. M. (2012). *The mediating role of learning styles and strategies in the relationship between cognitive ability and academic performance* (Unpublished master's thesis). University of Pretoria, Pretoria, South Africa.
- Romer, D. (1993). Do students go to class? Should they? *Journal of Economic Perspectives* 7(3), 167-174. doi:10.1257/jep.7.3.167
- Ross-Gordon, J. M. (2011). Research on adult learners: Supporting the needs of a student population that is no longer non-traditional. *Peer Review*, 13(1). 26. Retrieved from <http://bit.ly/2h0ogIX>
- Rothwell, A., Herbert, I., & Rothwell, F. (2008). Self-perceived employability: Construction and initial validation of a scale for university students. *Journal of Vocational Behavior*, 73(1), 1-12. doi:10.1016/j.jvb.2007.12.001.
- Rotter, J. B. (1966). Generalized expectancies for internal versus external control of reinforcement. *Psychological Monographs*, 80(1, Whole No. 609) Retrieved from <http://psycnet.apa.org/psycinfo/1966-02392-001>
- Rousseau, D. M. (1995). *Psychological contract in organizations: Understanding written and unwritten agreements*. Newbury Park, CA: Sage.
- Rovai, A. P. (2003). In search of higher persistence rates in distance education online programs. *Internet and Higher Education*, 6(1), 1-16. doi:10.1016/S1096-7516(02)00158-6
- Ryan, M. P., & Glenn, P. A. (2004). What do first-year students need most: Learning strategies instruction or academic socialization? *Journal of College Reading and Learning*, 34(2), 4-28. doi:<http://dx.doi.org/10.1080/10790195.2004.10850159>
- Ryan, R. G., Wilson, J. H., & Pugh, J. L. (2011). Psychometric characteristics of the professor-student rapport scale. *Teaching of Psychology*, 38(3), 135-141. doi:10.1177/0098628311411894
- Sadler, E., & Erasmus, B. J. (2005). The academic success and failure of black chartered accounting graduates in South Africa: A distance education perspective. *Meditari*

- Accountancy Research*, 13(1), 29-50. Retrieved from http://reference.sabinet.co.za/webx/access/journal_archive/10222529/121.pdf
- Sahraee, A., Mahdian, M. J., & Dinarvand, H. (2015). A comparative study of the impact of qualitative-descriptive evaluation and quantitative evaluation methods on academic progress and academic motivation among sixth grade students. *Journal of Management Research*, 7(5), 96-108. doi:10.5296/jmr.v7i5.8127
- Salamonson, Y., Andrew, S., & Everett, B. (2009). Academic engagement and disengagement as predictors of performance in pathophysiology among nursing students. *Advances in Contemporary Nurse Education*, 32(1-2), 125-134. doi:10.5172/conu.32.1-2.123
- Sanchez, F. J. P., & Sanchez Roda, M. D. (2003). Relationships between self-concept and academic achievement in primary students. *Electronic Journal of Research in Educational Psychology and Psychopedagogy*, 1(1), 95-120. Retrieved from <http://pubs.econtentmanagement.com/doi/abs/10.5172/conu.32.1-2.123?journalCode=conu>
- Sandelowski, M. (2008). Theoretical saturation. In L. M. Given (Ed.), *The Sage encyclopedia of qualitative methods* (Vol. 1, pp. 875-876). Thousand Oaks, CA: Sage.
- Saunders, K. C. (2008). *Should they stay or should they go? An analysis of appeal statements of academically dismissed university students* (Unpublished doctoral dissertation). State University of New York, Buffalo, NY.
- Schippers, M. C., Scheepers, W. A., & Peterson, J. B. (2015). A scalable goal-setting intervention closes both the gender and ethnic minority achievement gap. *Palgrave Communications*, 1(15014). doi:10.1057/palcomms.2015.14
- Schmitt, N. (1996). Uses and abuses of coefficient alpha. *Psychological Assessment*, 8(4), 350-353. doi:10.1037/1040-3590.8.4.350
- Scott, I. (2009). First-year experience as terrain of failure or platform for development? Critical choices for higher education. In B. Leibowitz, A. van der Merwe, & S. van Schalkwyk (Eds.) *Focus on first year success: Perspectives emerging from South Africa and beyond* (pp. 17-37). Stellenbosch, South Africa: African Sun Media.

Factors and experiences related to academic success

- Scott, I., Yeld, N., & Hendry, J. (2007). *A case for improving teaching and learning in South African higher education* (Higher Education Monitor No. 6). Pretoria, South Africa: Council on Higher Education.
- Scott-Clayton, J. (2012, January). *What explains trends in labor supply among U.S. undergraduates, 1970–2009?* (NBER Working Paper No. 17744). Cambridge, MA: National Bureau of Economic Research.
- Seidman, A. (Ed.). (2005). *College student retention: Formula for student success*. Westport, CT: Praeger.
- Sentamu, N. P. (2003). School's influence of learning: A case of upper primary schools in Kampala & Wakiso Districts. *Uganda Education Journal*, 4, 25-41.
- Settles, J. L. (2011). *The effects of family structure, family responsibilities, and family closeness on the college decisions of Hispanic high school students* (Unpublished doctoral dissertation). University of Iowa, Iowa, IW.
- Shamsudin, S., Ismail, S. F., Al Mamun, A., & Nordin, S. K. S. (2014). Examining the effect of extracurricular activities on academic achievements among the public university students in Malaysia. *Asian Social Science*, 10(9), 171-177. doi:10.5539/ass.v10n9p171
- Shavelson, R. J., & Huang, L. (2003). Responding responsibly to the frenzy to access learning in Higher Education. *Change*, 35(1), 10-19. Retrieved from <http://bit.ly/2h9NEGa>
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75. Retrieved from <https://xa.yimg.com/kq/groups/73868647/name/Trustworthypaper.pdf>
- Shulman, L. S. (2002). Making differences: A table of learning. *Change*, 34(6), 36-45. doi:10.1080/00091380209605567
- Sigelman, C. K., & Rider, E. A. (2006). *Life-span human development*, (5th ed.). Belmont, CA: Thomson Wadsworth.
- Sikhwari, T. D. (2007). The relationship between affective factors and the academic achievement of students at the University of Venda. *South African Journal of Higher Education*. 21(3), 520-536. Retrieved from <http://bit.ly/2h0ufH9>

- Sikhwari, T. D. (2014). A study of the relationship between motivation, self-concept and academic achievement of students at a university in Limpopo Province, South Africa. *International Journal of Educational Science*, 6(1), 19-25. Retrieved from <http://bit.ly/2h9OPFE>
- Silverman, D. (2013). *Doing qualitative research* (4th ed.). London, United Kingdom: Sage.
- Singh, K., Granville, M., & Dika, S. (2002). Mathematics and Science achievement: Effects of motivation, interest and academic engagement. *The Journal of Educational Research*, 95(6), 323-332. doi:10.1080/00220670209596607
- Singh, P., Mbokodi, S. M. (2004). Black parental involvement in education. *South African Journal of Education*, 24(4), 301-307. Retrieved from <http://www.ecdoe.gov.za/research/files/journal%2010.pdf>
- Siyengo, N. (2015). *The educational and psychosocial experiences of first generation students in higher education* (Unpublished master's thesis). Stellenbosch University, Stellenbosch, South Africa.
- Smith, J. & Naylor, R. (2001). Determinants of degree performance in UK universities: A statistical analysis of the 1993 student cohort. *Oxford Bulletin of Economics and Statistics*, 63(1), 29-60. doi:10.1111/1468-0084.00208
- Smith, J. A., Larkin, M., & Flowers, P. (2009). *Interpretative phenomenological analysis: Theory, method and research*. London, United Kingdom: Sage.
- Smith, J., & Naylor, R. (2005). Schooling effects on subsequent university performance: Evidence for the UK university population. *Economics of Education Review*, 24(5), 549-562. doi:<http://dx.doi.org/10.1016/j.econedurev.2004.07.016>
- Social Research Association (SRA). (2003). *Ethical Guidelines*. Retrieved from <http://thesra.org.uk/wp-content/uploads/ethics03.pdf>
- Social Science Research Council Project. (2005). *Transitions to college: From theory to practice. Questions that matter: Setting the research agenda on access and success in postsecondary education*. Retrieved from <http://bit.ly/2haIQOj>

- Solberg, V. S., Hale, J. B., Villarreal, P., & Kavanagh, J. (1993). Development of the College Stress Inventory for use with Hispanic populations: A confirmatory analytic approach. *Hispanic Journal of Behavioral Sciences*, 15(4), 490-497. doi:10.1177/07399863930154004
- Sommer, M. M. (2013). *Psychosocial factors predicting the adjustment and academic performance of university students* (Unpublished doctoral dissertation). University of South Africa, Pretoria.
- South African Qualifications Authority (SAQA). (1997). *SAQA Bulletin 1*(1). Pretoria, South Africa: South African Qualifications Authority.
- Spady, W. (1970). Dropouts from higher education: An interdisciplinary review and synthesis. *Interchange*, 1(1), 64-85. doi:10.1007/BF02214313
- Spady, W. (1971). Dropouts from higher education: Toward an empirical model. *Interchange*, 2(3), 38-62. doi:10.1007/BF02282469
- Spaull, N. (2013). *South Africa's education crisis: The quality of education in South Africa 1994-2011*. Report Commissioned by the Centre for Development and Enterprise (CDE). Retrieved from <http://www.section27.org.za/wp-content/uploads/2013/10/Spaull-2013-CDE-report-South-Africas-Education-Crisis.pdf>
- St John, E. P., Cabrera, A. F., Nora, A., & Asker, E. H. (2000). Economic influences on persistence reconsidered. How can finance research inform the reconceptualization of persistence models? In J. M. Braxton (Ed.), *Reworking the student departing puzzle*. Nashville, TN: Vanderbilt University Press.
- Stage, F. K., & Hossler, D. (2000). Where is the student? Linking student behaviours, college choice and college persistence. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 170-195). Nashville, TN: Vanderbilt University Press.
- Stahl, V. V., & Pavel, D. M. (1992, April). *Assessing the Bean and Metzner model with community college student data*. Paper presented at the AERA annual meeting, San Francisco, CA.

Factors and experiences related to academic success

- Stake, R. E. (2005). Qualitative case studies. In N. K. Denzin & Y. S. Lincoln (Eds.), *The Sage handbook of qualitative research* (3rd ed., pp. 443-466). California, CA: Sage.
- Stanca, L. (2006). The effects of attendance on academic performance: Panel data evidence for introductory microeconomics. *Journal of Economic Education*, 37(3), 251-266. Retrieved from <http://www.jstor.org/stable/30042715>
- Stanton-Salazar, R. D. & Spina, S. U. (2005). Adolescent peer networks as a context for social and emotional support. *Youth & Society*, 36(4), 379-417. Retrieved from <http://www.eric.ed.gov/?id=EJ739174>
- Stanton-Salazar, R. D. (2004). Social capital among working-class minority students. In M. A. Gibson, P. Gandara, & J. P. Koyama (Eds.). *School connections: U.S. Mexican youth, peers, and school achievement* (pp. 18-38). New York, NY: Teachers College Press.
- Stassen, M. L. A. (2003). Student outcomes: The impact of varying living-learning community models. *Research in Higher Education*, 44(5), 581-613. Retrieved from <http://www.jstor.org/stable/40197323>
- Statistics South Africa. (2014). *Poverty trends in South Africa: An examination of absolute poverty between 2006 and 2011*. Retrieved from <http://beta2.statssa.gov.za/publications/Report-03-10-06/Report-03-10-06March2014.pdf>
- Stebbins, R. A. (2001). *Exploratory research in the Social Sciences* (Sage University Papers Series on Qualitative Research Methods, Vol. 48). Thousand Oaks, CA: Sage.
- Stebbleton, M. J., & Soria, K. (2012). Breaking down barriers: Academic obstacles of first-generation students at research universities. *The Learning Assistance Review*, 17(2), 7-10. Retrieved from http://works.bepress.com/michael_stebbleton/3
- Stephen, D. F. (2007). *English language proficiency as a likely predictor of academic performance of first year human resources management studies at Technikon Natal* (Unpublished doctoral dissertation). RandAfrikaans University, Johannesburg, South Africa.

- Stephen, D. F., Welman, J. C., & Jordaan, W. J. (2004). English language proficiency as an indicator of academic performance at a tertiary institution. *SA Journal of Human Resource Management*, 2(3), 42-53. doi:10.4102/sajhrm.v2i3.48
- Steur, J., Jansen, E., & Hofman, A. (2016). Towards graduateness: Exploring academic intellectual development in university master's students. *Educational Research and Evaluation*, 22(1-2), 6-22. doi:http://dx.doi.org/10.1080/13803611.2016.1165708
- Steyn, A. G. W., & De Villiers, A. P. (2007). Public Funding of higher education in South Africa by means of formulae. In Council on Higher Education (Ed.), *Review of higher education in South Africa: Selected themes* (pp. 11-52). Pretoria, South Africa: Council on Higher Education.
- Steyn, H. S. (1999). *Praktiese beduidendheid: Die gebruik van effekgroottes*. Potchefstroom, South Africa: Potchefstroom University.
- Steyn, M. G., Harris, T., & Hartell, C. G. (2012). Where are the foundation phase teachers for our children? Black students' perceptions. *South African Journal of Higher Education*, 25(3), 583-597. Retrieved from <http://hdl.handle.net/2263/17680>
- Steyn, M. G., Harris, T., & Hartell, C. G. (2014). Institutional factors that affect black South African students' perceptions of early childhood teacher education. *South African Journal of Education*, 34(3), 1-7. Retrieved from <http://www.scielo.org.za/pdf/saje/v34n3/15.pdf>
- Stipek, D. J., & Weisz, J. R. (1981). Perceived control and children's academic achievement: A review and critique of the locus of control research. *Review of Educational Research*, 51, 101-137.
- Stokes, D., Bergin, R. (2006). Methodology or "methodolarty"? An evaluation of focus groups and depth interviews. *Qualitative Market Research: An International Journal*, 9(1), 26-37. Retrieved from <http://dx.doi.org/doi:10.1108/13522750610640530>
- Strahan, E. Y. (2003). The effects of social anxiety and social skills on academic performance. *Personality and Individual Differences*, 34(2), 347-366. doi:10.1016/S0191-8869(02)00049-1

- Strahn-Koller, B. L. (2012). *Academic transfer shock and social integration: A comparison of outcomes for traditional and non-traditional students transferring from 2-year to 4-year institutions*. (Unpublished doctoral dissertation). University of Iowa, Iowa, IA
- Stratton, L. S., O'Toole, D. M., & Wetzel, J. N. (2005). *A multinomial logit model of college stopout and dropout behavior* (IZ DP No. 1634). Institute for the Study of Labour: Bonn, Germany. Retrieved from <http://ftp.iza.org/dp1634.pdf>
- Strauss, L. C., & Volkwein, J. F. (2002). Comparing student performance and growth in 2 and 4 year institutions. *Research in Higher Education*, 43(2), 133-161. doi:10.1023/A:1014495823183
- Strayhorn, T. L. (2012). *College students' sense of belonging: A key to educational success*. New York, NY: Routledge.
- Strom, R. E., Savage, M. W. (2014). Assessing the relationships between perceived support from close others, goal commitment, and persistence decisions at the college level. *Communication Faculty Publications*, 55(6), 531-547. Retrieved from http://uknowledge.uky.edu/comm_facpub/4.
- Strydom, J. F., & Basson, N. (2010). *CHE-UFS Student Engagement Research Project* (Report for the Council on Higher Education). Bloemfontein, South Africa: University of the Free State.
- Strydom, J. F., & Mentz, M. (2010). *South African survey for student engagement: Focusing the student experience on success through student engagement*. Pretoria, South Africa: Council on Higher Education.
- Strydom, J. F., Basson, N., & Mentz, M. (2012). *Enhancing the quality of teaching and learning: Using student engagement data to establish a culture of evidence*. Pretoria, South Africa: Council on Higher Education.
- Strydom, J. F., Kuh, G. D., & Mentz, M. (2010). Enhancing success in South Africa's higher education: Measuring student engagement. *Acta Academica*, 42(1), 259-278. ISSN 0587-2405

- Subotsky, G. (2003). Public Higher Education. In A. Kraak & H. Perold (Eds.), *Human resources development review 2003: Education, employment and skills in South Africa* (pp. 353-379). South Africa: HSRC Press.
- Sullivan, G. M., & Feinn, R. (2012). Using effect size – or why the P value is not enough. *Journal of Graduate Medical Education*, 4(3), 279-282. doi:10.4300/JGME-D-12-00156.1
- Swail, W. S., Redd, K. E., & Perna, L. W. (2003). Retaining minority students in higher education. A framework for success. *ASHE-ERIC Higher Education Report*, 30(2). Retrieved from http://www.educationalpolicy.org/pdf/Swail_Retention_Book.pdf.
- Swaner, L. E., & Brownell, J. E. (2008). *Outcomes of high impact practices for underserved students: A review of the literature*. Washington, DC: American Colleges and Universities.
- Sy, S. R. & Brittian, A. (2008). The impact of family obligations on young women's decisions during the transition to college: A comparison of Latina, European American, and Asian. *Sex Roles*, 58, 729-737. doi:10.1007/s11199-007.9385-z
- Tabachnick, B. G., & Fidell, L. S. (2001). *Using multivariate statistics* (5th ed.). San Francisco, CA: Pearson.
- Tait, M., Van Eeden, S., & Tait, M. (2002). An exploratory study on the perceptions of previously educationally disadvantaged first-year learners of law regarding university education. *South African Journal of Higher Education*, 16(2), 177-182. Retrieved from https://www.researchgate.net/publication/272337833_An-exploratory_study_on_the_perceptions_of_previously_disadvantaged_first-year_learners_of_law_regarding_university_education.
- Teddlie, C., & Tashakkori, A. (2006). A general typology of research designs featuring mixed methods. *Research in the Schools*, 13(1), 12-28. Retrieved from <http://citeseerx.ist.psu.edu/viewdoc/download?doi10.1.1.564.6225&rep=rep1&type=pdf>
- Teddlie, C., & Tashakkori, A. (2009). *Foundations of mixed methods research. Integrating quantitative and qualitative approaches in the Social and Behavioural Sciences*. Thousand Oaks, CA: Sage.

- Thatcher, A., Fridjon, P., & Cockcroft, K. (2007). The relationship between lecture attendance and academic performance in an undergraduate psychology class. *South African Journal of Psychology, 37*(3), 656-660. doi:10.1177/008124630703700316
- Theron, E. (2015). *Student engagement as a way of enhancing student success at a private higher education institution* (Unpublished master's thesis). University of Stellenbosch, Stellenbosch, South Africa.
- Thiele, T., Pope, D., Singleton, A., & Stanistreet, D. (2016). Role of students' context in predicting academic performance at a medical school: A retrospective cohort study, *BMJ Open, 6*(3). doi:10.1136/bmjopen-2015-010169
- Thomas, L. (2002). Student retention in higher education: The role of institutional habitus. *Journal of Educational Policy, 17*(4), 423-442. doi:10.1080/0268093021014025
- Thomas, L. (2012). *Building student engagement and belonging in higher education at a time of change* (Final report from the What Works? Student retention and success program). Retrieved from the What Works? Student retention and success website: https://www.heacademy.ac.uk/system/files/what_works_final_report_0.pdf
- Thomas, R., & Quinlan, E. (2014). Teaching and learning focus group facilitation: An encounter with experiential learning in a graduate Sociology classroom. *Transformative Dialogues: Teaching & Learning Journal, 7*(1), 1-15. Retrieved from http://www.kpu.ca/sites/default/files/Transformative%20Dialogues/TD.7.1.7_Thomas%26Quinlan_Focus_Group_Facilitation.pdf
- Thompson, M. D. (2001). Informal student-faculty interaction: Its relationship to educational gains in Science and Mathematics among community college students. *Community College Review, 29*(1), 35-57. doi:10.1177/009155210102900103
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research, 45*(1), 89-122. doi:10.3102/00346543045001089
- Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago, IL: The University of Chicago Press.

Factors and experiences related to academic success

- Tinto, V. (1993). *Leaving college: Rethinking the causes and cures of student attrition*, (2nd ed.). Chicago, IL: The University of Chicago Press.
- Tinto, V. (2000). Linking learning and leaving: Exploring the role of the college classroom in student departure. In J. M. Braxton (Ed.), *Reworking the student departure puzzle* (pp. 81-94). Nashville, TE: Vanderbilt University Press.
- Tinto, V., & Pusser, B. (2006). *Moving from theory to action: Building a model of institutional action for student success*. Washington, DC: National Postsecondary Education Cooperative, Department of Education.
- Toutkoushian, R. K., & Smart, J. C. (2001). Do institutional characteristics affect student gains from college? *Review of Higher Education*, 25(1), 39-61. doi:10.1353/rhe.2001.0017
- Townsend, B. K., & Wilson, K. B. (2009). The academic and social integration of persisting community college transfer students. *Journal of College Student Retention*, 10(4), 405-423. Retrieved from <http://bit.ly/2haJCLj>
- Tracy, S. J. (2010). Qualitative quality: Eight 'Big-Tent' criteria for excellent qualitative research. *Qualitative Inquiry* 16(10), 837-851. doi:10.1177/1077800410383121
- Tran, V. D. (2014). The effects of cooperative learning on the academic achievement and knowledge retention. *International Journal of Higher Education*, 3(2), 131-140. doi:10.5430/ijhe.v3n2p131
- Trautwein, U., Lüdtke, O., Marsh, H. W., Köller, O., & Baumert, J. (2006). Tracking, grading, and student motivation: Using group composition and status to predict self-concept and interest in ninth-grade mathematics. *Journal of Educational Psychology*, 98(4): 788-806. doi:10.1037/0022-0663.98.4.788
- Trowler, V. (2010). *Student engagement literature review*. York: Higher Education Academy. Retrieved from https://www.heacademy.ac.uk/system/files/studentengagementevidence_summary_0.pdf

- Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. *Research in Higher Education*, 46(2), 153-184. doi:10.1007/s11162-004-1598-1
- University of the Free State (UFS). (2008). *Integrasie van ontwikkelingsmodules en hoofstroommodules in die B.A.- & B.Soc.Sc-vierjaarkurrikulum*. Bloemfontein, South Africa.
- University of the Free State (UFS). (2011). *Annual report to the Minister of Higher Education and training 2011*. Retrieved from <http://www.ufs.ac.za/docs/default-source/all-documents/2011-annual-report-1002-eng.pdf?sfvrsn=0>
- University of the Free State (UFS). (2012). *Strategic plan 2012-2016*. Retrieved from <http://www.ufs.ac.za/docs/default-source/all-documents/strategic-plan-931.pdf?sfvrsn=4>
- University of the Free State (UFS). (2013). *Annual Report to the Minister of Higher Education and Training 2013*. Retrieved from www.ac.za/docs/default-source/annual-report-to-the-minister-of-education-2013-2537.pdf?sfvrsn=6
- University of the Free State (UFS). (2014). *Integrated report*. Retrieved from [http://www.ufs.ac.za/docs/default-source/all-documents/2014-integrated-report-\(pdf\).pdf?sfvrsn=](http://www.ufs.ac.za/docs/default-source/all-documents/2014-integrated-report-(pdf).pdf?sfvrsn=)
- University of the Free State (UFS). (2015). *Prospectus 2015*. Retrieved from <http://www.ufs.ac.za/docs/librariesprovider30/varsity-college-documents/updated-web-version-2015-documents/law-prospectus-2015-68-eng.pdf?sfvrsn=0>
- Van de Mortel, T. F. (2008). Faking it: Social desirability response bias in self-report research. *Australian Journal of Advanced Nursing*, 25(4), 40-48. Retrieved from http://www.epubs.scu.edu.au/cgi/viewcontent.cgi?article=1001&context=hahs_pubs
- Van den Berg, G., & Coetzee, L. R. (2014). Academic self-concept and motivation as predictors of academic achievement. *International Journal of Educational Science*, 6(3), 496-478. Retrieved from [http://krepublishers.com/02-Journals/IJES/IJES-06-0-000-14-Web/IJES-06-3-000-14-Abst-PDF/IJES-6-3-469-14-295-van-den-Berg-G/IJES-6-3-469-14-295-van-den-Berg-G-Tx\[11\].pdf](http://krepublishers.com/02-Journals/IJES/IJES-06-0-000-14-Web/IJES-06-3-000-14-Abst-PDF/IJES-6-3-469-14-295-van-den-Berg-G/IJES-6-3-469-14-295-van-den-Berg-G-Tx[11].pdf)

- Van der Berg, S. (2008). How effective are poor schools? Poverty and educational outcomes in South Africa. *Studies in Educational Evaluation*, 34(3), 145-154. doi:10.1016/j.stueduc.2008.07.005 .
- Van der Westhuizen, A. (2008). *Die verband tussen akademiese selfkonsep en akademiese prestasie in gemengde- en enkelgeslagskole*. (Unpublished master's thesis). University of the Free State, Bloemfontein, South Africa.
- Van Dyk, T., & Weideman, A. (2004). Switching constructs: On the selection of an appropriate blueprint for academic literacy assessment. *Journal for Language Teaching*, 38(1), 1-2. doi:<http://dx.doi.org/10.4314/jlt.v38i1.6024>
- Van Gennep, A. (1960). *The rites of passage*. London, England: Routledge & Kegan Paul.
- Van Rooy, B., & Coetzee-Van Rooy, S. (2015). The language issue and academic performance at a South African university. *Southern African Linguistics and Applied Language Studies*, 33(1), 31-46. doi:10.2989/16073614.2015.1012691
- Van Rooyen, E. (2001). Die voorspelling van die akademiese prestasie van studente in 'n oorbruggingsprogram. *South African Journal of Higher Education*, 15(1), 180-189.
- Van Schalkwyk, S. C. (2007). Crossing discourse boundaries: Students' diverse realities negotiating entry into knowledge communities. *South African Journal of Higher Education*, 21(7), 954-968. Retrieved from <http://www.ajol.info/index.php/ajhpe/article/viewFile/69937/58011>
- Van Walbeek, C. (2004). Does lecture attendance matter? Some observations from a first-year economics course at the University of Cape Town. *South African Journal of Economics*, 72(4), 861-883. doi:10.1111/j.1813-6982.2004.tb00137.x
- Van Zyl, A. (2013, November). *Teaching the students, we have: Two perspectives on first year students at the University of Johannesburg and the UJ first year experience initiative*. Paper presented at Higher Education Learning and Teaching Association of South Africa (HELTASA), Pretoria, South Africa. Abstract retrieved from <http://hdl.handle.net/10210/12491>

- Van Zyl, A. (2016). The contours of inequality: The links between socio-economic status of students and other variables at the University of Johannesburg. *Journal of Student Affairs in Africa*, 4(1), 1-16. doi:10.14426/jsaa.v4i1.141
- Van Zyl, R. (2009). *’n Ondersoek na taalhoudings en persepsies van graad 12 leerders in drie Afrikaanse hoërskole in Johannesburg* (Unpublished master’s thesis). University of Johannesburg, Johannesburg, South Africa.
- Veas, A. I., Gilar, R., & Miñano, P. (2016). The influence of gender, intellectual ability, academic self-concept, self-regulation, learning strategies, popularity and parent involvement in early adolescence. *International Journal of Information and Education Technology*, 6(8), 591-597. Retrieved from <http://www.ijiet.org/vol6/757-PS040.pdf>
- Venezia, A., Callan, P. M., Finney, J. E., Kirst, M. W., & Usdan, M. D. (2005). *The governance divide: A report on a four-state study on improving college readiness and success*. San Jose, CA: The Institute for Educational Leadership, Stanford Institute for Higher Education Research.
- Vogel, F. R., & Human-Vogel, S. (2016). Academic commitment and self-efficacy as predictors of academic achievement in additional materials science. *Higher Education Research & Development*, 35(6), 1298-1310. doi:<http://dx.doi.org/10.1080/07294360.2016.1144574>
- Vygotsky, L. S. (1962). *Thought and Language*. Cambridge, MA: MIT Press.
- Wadesango, N., & Machingambi, S. (2011). Causes and structural effects of student absenteeism: A case study of three South African universities. *Journal of Social Sciences*, 26(2), 89-97. Retrieved from <http://www.krepublishers.com/02-Journals/JSS/JSS-26-0-000-11-Web/JSS-26-2-000-11-Abst-PDF/JSS-26-2-089-11-1143-Wadesango-N/JSS-26-2-089-11-1143-Wadesango-N-Tt.pdf>
- Wagner, L., & Ruch, W. (2015). Good character at school: Positive classroom behavior mediates the link between character strengths and school achievement. *Frontiers in Psychology*, 6(610). doi:10.3389/fpsyg.2015.00610

Factors and experiences related to academic success

- Walker, W. (2005). The strengths and weaknesses of research designs involving quantitative measures. *Journal of Research in Nursing, 10*(5), 571-582. doi:10.1177/136140960501000505
- Walters, S., & Koetsier, J. (2006). Working adults learning in South African higher education. *Perspectives in Education, 24*(3), 97-108. Retrieved from <http://bit.ly/2gfV5vP>
- Watanabe, L. E. (2005). The effects of college student employment on academic achievement. *The University of Central Florida Undergraduate Research Journal, 1*, 38-47. Retrieved from https://www.urj.ucf.edu/docs/urjmanuscript_watanabe_080509.pdf
- Waters, A. (2008). Nursing student attrition is costing taxpayers 99 million a year. *Nursing Standard, 22*(31), 12-15. Retrieved from <http://dx.doi.org/10.7748/ns2008.04.22.31.12w38002>
- Watson, P. (2008). Measuring postgraduate cohort throughput: A case study. *South African Journal of Higher Education 22*(3), 725-739. Retrieved from <http://www.ajol.info/index.php/sajhe/article/view/25813/4677>
- Watts, C. (2002). The effects of term-time employment on academic performance. *Education & Training, 44*(2), 67-75. doi:10.1108/00400910210419964
- Weaver, K. (2011). *Standardized testing measuring the academic success of students*. Unpublished manuscript. Liberty University, Lynchburg, VA.
- Webb, C., & Kevern, J. (2001). Focus groups as a research method: A critique of some aspects of their use in nursing research. *Journal of Advanced Nursing 33*(6), 798-805. doi:10.1046/j.1365-2648.2001.01720.x
- Webster, S., Lewis, J., & Brown, A. (2013). Ethical considerations in qualitative research. In J. Ritchie, J. Lewis, C. McNaughton Nicholls, & R. Ormston (Eds.), *Qualitative research practice. A guide for social science students and researchers* (2nd ed.). Thousand Oaks, CA: Sage.
- Whannell, R., Alen, B., & Lynch, K. (2010). Casualties of schooling? 18 to 22-year-old students in a tertiary bridging program. *Australian Journal of Teacher Education, 35*(5), 1-17. doi:<http://dx.doi.org/10.14221/ajte.2010v35n5.1>

- Wilcox, P., Winn, S., & Fyvie-Gauld, M. (2005). 'It was nothing to do with the university, it was just the people': The role of social support in the first-year experience of higher education. *Studies in Higher Education*, 30(6), 707-722. doi:10.1080/03075070500340036
- Wilkinson, A. C. (2002, October). The impact of national transformation imperatives and quality monitoring on program evaluation in South African higher education. In *Transforming Quality*. Symposium conducted at the meeting of the Seventh Quality in Higher Education International Seminar of Melbourne. Melbourne, Australia.
- Wilms, J. D. (2003). *Student engagement at school: A sense of belonging and participation – Results from PISA 2000*. Retrieved from <http://www.oecd.org/dataoecd/42/35/33689437.pdf>
- Wilson, J. H., Ryan, R. G., & Pugh, J. L. (2010). Professor-student rapport scale predicts student outcomes. *Teaching of Psychology*, 37(4), 246-251. doi:10.1080/00986283.2010.510976
- Wilson-Strydom, M. (2010). Traversing the chasm from school to university in South Africa: A student perspective. *Tertiary Education and Management*, 16(4), 313-325. Retrieved from <http://dx.doi.org/10.1080/13583883.2010.532565>
- Wilson-Strydom, M. (2011). *UFS 2011 First year students' NBT performance at a glance: Bloemfontein students*, Unpublished report. University of the Free State, Bloemfontein, South Africa.
- Wilson-Strydom, M. (2015). *University access and success. Capabilities, diversity and social justice*. Routledge: Oxford, England, United Kingdom.
- Win, R. & Miller, P. (2005). The effects of individual and school factors on university students' academic performance. *Australian Economic Review*, 38(1), 1-18. doi:10.1111/j.1467-8462.2005.00349.x
- Winfield, J., & Luyt, J. (2013). An evaluation of an exploratory intervention to improve progression in a first-year accounting course. *The South African Journal of Accounting Research*, 27(1), 1-36. Retrieved from <http://www.sajar.co.za/documents/SAJAR27.pdf>

Factors and experiences related to academic success

- Winston, G. C., & Zimmerman, D. J. (2004). Peer effects in higher education. In C. M. Hoxby (Ed.). *College Choices: The economics of where to go, when to go and how to pay for it* (pp. 395-423). Chicago, IL: University of Chicago Press.
- Winter, G. (2000). A comparative discussion of the notion of validity in qualitative and quantitative research. *The Qualitative Report*, 4(3), 1-14. Retrieved from <http://www.nova.edu/sss/QR/QR4-3/winter.html>
- Wolf-Wendel, L., Ward, K., & Kinzie, J. (2009). A tangled web of terms: The overlap and unique contribution of involvement, engagement, and integration in understanding college student success. *Journal of College Student Development*, 50(4), 407-428. Retrieved from [https://kuscholarworks.ku.edu/bitstream/handle/1808/17576/Wolf-Wendel_JCSD_50\(4\)_407.pdf?sequence=1](https://kuscholarworks.ku.edu/bitstream/handle/1808/17576/Wolf-Wendel_JCSD_50(4)_407.pdf?sequence=1)
- Wood, J., & Turner, C. S. (2011). Black males and the community college: Student perspectives on faculty and academic success. *Community College Journal of Research & Practice*, 35(1-2), 135-151. doi:<http://dx.doi.org/10.1080/10668926.2010.526052>
- Woods, R. L., (2016). *Those who quit: A study of student retention at two-year community and for-profit colleges* (Doctoral dissertation). Seton Hall University. Retrieved from <http://scholarship.shu.edu/cgi/viewcontent.cgi?article=3224&context=dissertations>
- Wu, H., Garza, E., & Guzman, N. (2015). International students' challenge and adjustment to college. *Education Research International*, 2015, 9. doi:<http://dx.doi.org/10.1155/2015/202753>
- Yeld, N. (2003). Academic literacy and numeracy profiles: An analysis of some results from the AARP and TELP tests for incoming students (2001/2002 entry years). In *Into higher education – Perspectives on entry thresholds and enrolment systems* (pp. 21-52). Cape Town, South Africa: A joint SAUVCA-CTP publication.
- Yilmaz, E. (2014). Analysis of students' success in the exam for transition to further education through some of the variables. *International Journal of Academic Research*, 6(1): 57-63. doi:[10.7813/2075-4124.2014/6-1/B.8](http://dx.doi.org/10.7813/2075-4124.2014/6-1/B.8)

Factors and experiences related to academic success

- York, T. T., Gibson, C., & Rankin, S. (2015). Defining and measuring academic success. *Practical Assessment, Research & Evaluation, 20*(5), 1-20. Retrieved from <http://pareonline.net/getvn.asp?v=20&n=5>
- You, J. W. (2015). Examining the effect of academic procrastination on achievement using LMS data in e-learning. *Educational Technology & Society, 18*(3), 64-74. Retrieved from http://www.ifets.info/journals/18_3/5.pdf
- Young, D. G. (2016). The case for an integrated approach to transition programs at South Africa's higher education institutions. *Journal of Student Affairs in Africa, 4*(1), 17-32. doi:10.14426/jsaa.v4i1.142
- Zirkel, S. (2005). Ongoing issues of racial and ethnic stigma in education 50 years after Brown v. Board. *The Urban Review, 37*(2), 107-126. doi:0042-0972/05/0600-0107/0
- Zulauf, C. (2001, April). Studying still the key to academic success. *USA Today*. Retrieved from <http://connection.ebscohost.com/c/articles/4316190/studying-still-key-academic-success>
- Zulu, C. (2008). An exploratory study of first-year students at a historically black university campus in South Africa: Their academic experiences, success and failure. *Africa Education Review, 5*(11), 30-47. doi:10.1080/18146620802121576

Appendix A: Information Document / Consent form for Quantitative Participants



Faculty of the Humanities

Extended programme: Research survey

INFORMATION AND CONSENT

This survey is part of a research project of the Faculty of the Humanities, University of the Free State. It is conducted in collaboration with a doctoral student to fulfil the requirements of a Doctoral degree in Psychology.

In this survey we are investigating the effect of certain factors on the academic success of first, second, third and fourth year students in the extended curriculum.

Information obtained in this survey will be used to better understand the experience of students in the extended curriculum and to change programmes to better meet the needs of students in this curriculum.

Anonymity of all the participants will be ensured and all information obtained will be treated as confidential. Participation in this project is voluntary and participants may choose to withdraw from the study at any time.

When you decide to participate in the research, the following will be expected of you:

- Completing this survey.
- Giving the researchers permission to access your academic record, Grade 12 results and benchmark test scores.

Completing the questionnaires should take approximately 45 minutes.

By completing the following questionnaires, you voluntary agree to take part in the study and give your consent that data obtained may be used in the research report.

Kind regards

Andri Burger
Naudé
an3keev@yahoo.com

Promoter: Prof L

Appendix B: Information Document for Focus Group Participants



April 2015

Factors that influence students' academic success

Information Document / Consent Form

Thank you for participating in this research study. This focus group discussion forms part of a research project conducted in collaboration with a doctoral student to fulfil the requirements of a Doctoral degree in Psychology.

In this group discussion we will investigate the impact of certain factors on the academic success of first, second, third and fourth year students in the Faculty of the Humanities. Information obtained during this discussion will be used to better understand the experience of students. The discussion will be recorded in order to be reviewed later.

Ethical clearance for this study has already been obtained from the University of the Free State. Anonymity of all the participants will be ensured and all information obtained will be treated as confidential. Participation in this project is voluntary and participants may choose to withdraw from the study at any time.

By participating in the focus group discussion, you voluntary agree to the following:

- Giving free and informed consent to participate in the abovementioned study.
- Understanding what the study is about, why you are participating and what the risks and benefits are.
- You give the researcher permission to make use of the data gathered from your participation, subject to the stipulations she has indicated in the above letter.

You can contact the researcher at any time if there are any queries regarding the research.

To be completed by the student / participant

Name: _____
Student number: _____
Age: _____
Gender: _____
Racial / ethnic group: _____
Academic year of study: _____
Home language: _____

Student signature

Date

Kind regards

Andri Burger
an3keev@yahoo.com

Promoter: Prof L Naudé

Appendix C: Excerpt of Reflective Diary

Reflective diary

I was impressed by the participants' insight into their own student behaviours and the level at which they answered the questions. The participants were able to make links between academic success and the factors related to academic success in a surprisingly coherent manner. I was also surprised by the way in which participants were able to debate with their peers with different opinions, and valuable information was gained from these discussions. It was wonderful to hear how motivated and determined some of the participants were to achieve success, despite very difficult backgrounds and circumstances. This highlighted the resilience of students who might be overlooked in a purely quantitative study. However, when I look back at the questions that I asked (as focus group facilitator) during the first two focus group discussions, I can see that some of the questions might have been too leading and could have prompted a specific response from participants.

Another frustration was that I felt that some of the discussions veered away from the topic and valuable time was lost due to myself (as facilitator) waiting too long to see if any noteworthy information would emerge. In focus groups 1 and 1, too much time was spent on the differences between the three-year and four-year curriculums, and I felt that not enough information regarding students' views about academic success and the factors involved in academic success was gathered. It also saddened me to see that the effect of Apartheid and racial inequalities still affect students today to a very large extent in terms of their perceptions and also the differences in the situations and backgrounds of students from different racial backgrounds.

Appendix D: Ethical Clearance Documents



25 February 2014

Dr L. Naudé
Department of Psychology
UFS

Ethical Clearance Application: Access with Success: Academic facilitator sessions in the extended programme of the Faculty of the Humanities

Dear Dr Naudé

With reference to your application for ethical clearance with the Faculty of the Humanities, I am pleased to inform you on behalf of the Ethics Board of the faculty that you have been granted ethical clearance for your research.

Your ethical clearance number, to be used in all correspondence, is:

UFS-HUM-2013-17

This ethical clearance number is valid for research conducted for one year from issuance. Should you require more time to complete this research, please apply for an extension in writing.

We request that any changes that may take place during the course of your research project be submitted in writing to the ethics office to ensure we are kept up to date with your progress and any ethical implications that may arise.

Thank you for submitting this proposal for ethical clearance and we wish you every success with your research.

Yours sincerely,

Katinka de Wet
Ethics Committee (Faculty of the Humanities)

Copy: Ms Charné van der Walt (Research Co-ordinator: Faculty of the Humanities)

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Appendix E: Example of a Focus Group Transcription

Interviewer: What is academic success to you?

Participant: Passing and ..academic success it is if I am at school then I need to be passing and getting good grades. And ja eventually I am going to get a job because of that, do you understand?

Participant: to add on what she just said it can involve like time management and school...balancing school and your social life and you know to get too your goal of actually a degree and doing what you love and ja.

Interviewer: Ok and how would you define ...if you think practically how would you define an academically successful student?

Participant: It's...an academically successful student would be a person who can multi task a person who is coping with their work. Uhmhm like I said passing, yes it might not be distinctions or anything because not all of us are... we are not all "A" students that we need to come in reality with. Uhmhm a 70% might be a distinction for me you know. So if I did pass I feel like I am academically successful as long as I do not fail.

Participant: what if I put it like; it is someone who sets a goal themselves

Participants: And then achieve it!

Participant: and then achieve it, like you know you come here and you are like 'this semester you know what I am not going to come back home for a re-assessment, I am going to get that 70% or whatever' and then you actually do achieve that, I would say you are academically successful"

Participant: Ja like Sphe said like we are not all 'A' students but then we all have like... we all set our own goals. Like Sne said once you reach that goal that you set then you are academically successful.

Interviewer: Ok so in that academic success when you have you have that in mind, what do you think are the most important contributors to academic success? What factors impact your academic success?

Participant: Time...

Participant: Definitely your surroundings somehow. Whether it is the people that you are around or things that you have to do Ja that definitely affects things although you might not necessarily want it to but it is kind of inevitable.

Participant: And time as well because it has to do with sacrifice.

Participant: Time management even because yes you have to study but studying and knowing that 'ok I have to study, I have to get a certain percentage' you going to need to

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study before if you know yourself and if you know you have to then I guess time management and actually doing what you said you were going to do and ja and actually doing it

Participant: And prioritising your work.

Participant: oh and for me personally like for real ..I feel like going to class for me is such a waste of time. (Laughter) like seriously I just get there and actually sit there and look at him and then I do not listen.

Participant: And then when you study you feel like you are doing something new.

Participant: Sometimes you go to the class and you get those lecturers that they going to read stuff that which they are going to upload on Blackboard. So what is the point of me going there if you are going to explain the same slides that I going to be on Blackboard? And I can actually interpret them my own way. So I just sit there like uhm I should have bunked this

Participant: sometimes I feel like uhm my gosh I wasted time. If I know the dates when I am writing and what to study , what I have to study when I am going to write then I seriously feel like class is just a waste of time.

Participant: Sometimes I also feel like that though. Because sometimes I get there and I am just not in the mood and.....

Participant: And you are not listening even.

Participant: And knowing me I just go because we are like two.

Participant: And sometimes you just go because you get those lecturers who are on some tip like 'you going to sign the register so you might never know when you might need that one mark and there would be like 'girl you were never attending classes so I am not giving you that one mark so sometimes the only reason you attend class, but most of the time it is useless.

Participant: And you are just there for that.

Interviewer: So if there were no penalties in signing the register or having your lecturer look at you in a funny way not go to class nor would you still go to class.

Participant: I wouldn't go to some...

Participant: Personally there are some that I wouldn't go to. Like for instance, Tax, in Tax I cannot hear that man. First to start off with his accent between me and him is a problem and then the mic, he puts the mic too close his mouth and then he ends up spitting on it and you cannot hear properly. Unless yes, going to him personally and be like 'but I don't understand this how do you do it' but that is after I had actually set down in my room and actually look at the work and going back to him and ask him to explain then I hear him. But I mean that is something I wouldn't go to class and then sit and study and then go back to him like I don't understand, like do you understand? Because I still didn't hear him when I went to class anyways

Participant: Just like Personology. Our lecturer, that Perl girl she is always rushing and people ask questions and she is all mean like 'I will not entertain that, you were supposed to come to class prepared'. What if I did prepare but I don't understand. Because she just does not take questions. Because I have been bunking that class and I am not the only one. Like the tutorial like I think that like five people only attend. Because they are like 'we do not hear'. There is a time when you get to a tutorial and the tutors are just standing there, there is no mic we are in a big hall, it is a bunch of students then you talk like you are talking to yourself, how am I supposed to understand that? So...

Interviewer: Speaking about lectures and tutors how do you feel like the relationship between your tutors and your lectures impact your academic success? Would you say the relationship that they have with you is conducive or it does not make any difference?

Participant: I would say it is because for me like in my one class we are 10 and she knows us all. So she tells us if you have problems please my office is always open. In my one class we are four in the other one we are two. So I would say we have like close relationships with our lecturers that is part of the reason why I keep going to class.

Participant: She is going to see when you are not there

Participant: Besides that I feel like let me just go because this person helps me a lot and I mean let me just go because sometimes she might say something important. Because I feel like if I do not go that person prepares for class and even if it is the two of us I feel like if I don't go I have let her down even if though when I really really need help she will say 'no come to my office, how are you? This is how you do things' and I feel like if you guys are less in class then you do well and they do try and help you do well. So in my case I would say it does..

Participant: With me on the other hand we have always been a lot. With Accounting like there are just a lot of people and my problem has never been with a lecturer the lecturer is good or anything because I am really not good with listening, like I have a problem. Five minutes and then my mind is somewhere else and so lecturers really are not a big problem. But my problem is when I study and then I fail and then I start not liking the actual course itself and then it becomes a problem. And then I become less and less interested and then I start not to work hard on it or anything like that because it did not go well so ja.

Participant: I would say like they go all out, some of them go all out to make sure that ok we need to help these students like for example psychopathology. Like he knows that there is a lot to study and then when he puts slides on Blackboard when he puts a scope he tells you exactly what to study and then you know. But thing is even though you know it is a lot, he summarises it he will not go out and ask something he did not tell you to study. But it is still going to be hard, you still going to fail but he is trying like they go all out to help us some of them ja.

Interviewer: And what about the..

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Participant: But you know the other thing that I noticed is that junior lectures, I feel like they are way better than the professors and your doctors. Because the doctors and professors they just tell you ok...

Participant: They expect you to know. They expect you to be like them

Participant: Whereas the junior lectures spoon feed you they really try for you to understand.

Participant: Because they understand..

Participant: Some of them treat you like you are already doing that profession

Participant: Exactly!

Participant: Because we are in university what do you want?

Participants: (Protesting) No but you must help us.

Participant: Because no like I feel like, speaking personally as a tutor I can only do so much, yes! I cannot spoon feed you all the time do you understand?

Participants: (Protesting) No there is a difference between the way you teach and the way you give tutorials

Participant: No it is really a matter of you walking to class on a certain day very hyped up to teach because you understand and you want them to understand and you want them to learn but you realise that we are teenagers and we think we know it all and because of that you are going to have problem with me spoon feeding you and you are going to have a problem with me spoon feeding you... wait! And at the same time if I come to class not prepared I am busy asking you questions, she doesn't teach right.. do you understand? Secondly if I come to class and I am telling you detail by detail, she teaches me like a kid do you understand? These are complaints that go now to the lecture or whoever which is why these people who are in high positions are privileged to act in a certain way, why because they have been doing this for I mean 15 years, 20 year plus. And they now know us because they know that we are oh so different we think we know it all and we all want it differently it is not like that. And as for me personally I go to class and I am really willing to teach someone and they sit and they look at me like I am dumb and it hurts. And with time you lose hope and you are like you know what I am just going to sit and look at you, if you do not answer the question then I am going to move on. So I completely understand those lectures who are just like ok did you study this page from chapter.. did you not.. ok moving right along. I totally understand because we meet half way if you don't meet me, don't meet me at all simple. It is really difficult guys.

Participant: We are not saying they should spoon feed us or anything like that. We are in varsity , but you cannot expect us to ..i am not a psychologist, she is not a plant pathologist , she is not a chartered accounted...

Participant: Guys you are in university!

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(Participants speaking over each other).

Participants: but we are still in the early stages we need to get there

Participant: You need to pull up your socks, you need to up your game.

Participant : there is a difference between the way you teach and the way your lecturer teaches, you find that they find your way better than they lecturer. What I am saying is for example my lecture was not here last week, you know when we have plus /minus three classes in a week , he expected us to know 200 pages , his like 'no self-study, 200 pages when I am gone' We do not even do 200 pages while he is there in class , what the hell? It is a book! It is like a bible like literally four columns, what am I supposed to do? 200 pages don't have other tests to study for?

Participant: There was this picture that said 'why do lecturers expect us to remember everything from every subject if one lecturer cannot teach all the subjects, why should I remember everything'

Participant: Guys you are being ...no it shouldn't be like that .i am really trying to explain to you.

(Participants talking over each other and protesting).

Participant: You know what I get what you are saying but problem is that you can't , ok fine I am a second year I have never done this before. You know it, you have done it you have been here and then you expect me to know.. where am I going to get these things?!

(Participants talking over each other)

Participant: We are in university and you know what? From university we are going to work and it is going to be harder. If you do not get this experience you will not make it out there. So you need to be appreciative of the hard times, because if you want ut to be like high school for you are not going to survive.

Participant: But that is not what we are saying, we do not want it to be like high school!

Participant: You are saying they are too tough on you now because you get a scope of 200 pages. Pressure is good.

Participant: You are doing law so it is understandable

(Participants talking over each other)

Participant: We will excuse you even though it is not what we are saying !

(Inaudible debating)

Interviewer: I am moving on. And living on campus , living in res how does that affect your academic success?

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Participant: I think living in res is much more convenient for a student, Because res firstly you are not off campus so for you to go to class it is not going to be difficult because you are going to be here although Roosmaryn (their residence) is like off campus but ok, it is more convenient to live at res because I , when I did not leave at res it was kind of difficult .

Participant: And many resources are within on campus.

Participants: And res is trying to even be like you study log and everything

Participant: It only becomes a problem for me though when we have to do weird things like cultural renewal like I am sorry I can't.

Participants: And house meeting, why do I need a house meeting every Monday.

Participant: Me I taped out and I am not going anymore

Participant: Why does it have to be , ok I understand there is a lot of things but how is once a month probably?

Participant: How about never!

Participant: And off campus you have to worry about things like 'uhm man I do not have money for electricity, money for rent. When you are in res maybe the only thing you can worry about is you not having groceries that month and at the same time you have people around res that can actually help you and contribute towards you getting groceries. When you live off campus those are the things you worry about and that might fuel the stress already have.

Participant: And another thing about people who stay off campus like you know sometimes you get given like assignments and you need the internet to do an assignment. What if it is a weekend, I can just go downstairs and so my assignment they have to now leave their place at seven and go to the labs

Participant: And maybe it is raining

Participant: And the labs you cant.. I can study here until freaking 4am! They have to go and be forced to leave the labs at like 10 before they are even done with their assignment. Sundays the labs do not open so it is over for them. I can still type it tonight and the following night and I can like stay up as long as you want to and type the assignment. For them it is like you have to plan ahead.

Participant: And it is more safer because you do not have to walk anywhere and getting mugged or anything like that , you know you are on campus you can talk to guards

Participant: And you can just go back to res when you forget your book.

Interviewer: I heard you guys talk about you hate house meetings and cultural renewals. Are any of you committed to in doing...

Participant: SAV committee which is in charge of cultural renewal.

Interviewer: I am asking do you have any other commitments in university like sports or debate or SRC and how does that affect your school work?

Participant: I was involved in basketball but I quit because they wasted my time (Laughter).

Participant: I am a peer mentor. Sometimes having to have these meetings like uhm they just plan ok these are the four days, this is the week that we are going to have to meet for meeting and they do not , it is not like they ask for our timetable to say k let us see how your timetable are looking this week, No they just tell you no from Monday to Thursday you have to book for a session, for a training session. And you cannot miss it so you have to sacrifice your study time, go there and if you do not go it is a big problem. You have to come back and organise a meeting. We do not have the same pressure I do not know how their tests are looking like so it puts pressure on me.

Interviewer: OK so your commitments to the university puts more pressure on you?

Participant: Not on me though.

Participant: Well it depends as I said earlier on it about prioritising.

Participant: The thing is I like concentrating on one thing, I am lazy so being in committees I feel like I am going to be tired then I am going to want to rest in my room for a while and then that means I am dead I am gone, I sleep I wake up in the morning I didn't do what I wanted to do. Whereas when I know that I am concentrating on my studies only. That is the only thing that I am going to focus on and that is the only thing that I need to do, yes I am still lazy to do that but ja.

Participant: But like being in committees teaches you to grow as a person having to balance stuff because you have to remember like when work or something you not only going to be going to work, one day you are going to be a mother you have to take care of your kids and drop them at school and having to juggle all of these things at once really helps you grow you know after you are done you are like 'wow it was tough work but I actually did it'.

Participant: But the thing is...I have been hearing a lot of that, people not understanding. Because I actually tried a diet but I found that when you are studying I feel like eating junk food because junk food is like comfort food type of thing. I always want to munch on something when I am studying I can't just study and just be fine I want to munch on something. And then someone said something similar to what Sne is saying, books need you attention they need you to concentrate they want you to be attentive to the max. Whereas you could be a mother like I mean remembering something , remembering lunch for a kid is not that much of a big deal. And you are not going to fail at it type of thing. You are not going to have to fail at doing anything you know? And so ja, like that is the thing with me I feel like it is different things. Yes they do teach you how to multi task and anything like that but I feel like school is the one thing that needs your brain the most, you need to be attentive.

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Participant: I think Sphe hates school but.. (laughing).

Participant: And I do, that is the thing I do not like school. That is the thing and school for me is just too much.

Interviewer: With that being said how do you feel about social contact with friends and relationships that kind of thing.

Participant: I love friends, I love talking I love chilling.

Participant: Yes like we just recently got in trouble because she is always in my room making noise, now we are known as the people that make noise in the corridor and disturbing other kids while they are studying.

Participant: I can do anything else but books and studying. You see with socials I am good at those things.

Interviewer: So social life is important for you?

Participant: It is good for you. It is good you know and it does actually change how I feel. Because for instance I have been feeling very down you know, because I felt like oh my gosh my marks and everything and what not. Things are not going well and it is not like I haven't been studying but they are just not going well you know. And when we went out yesterday and watched a movie I actually got hyped up and my state of, you know sadness it changed! Like it did change and I was actually happy and I felt happy. And for me being happy means I am going to want to try again actually do something. Whereas when I was sad after getting those marks and everything I feel like what is the point? But you know social contact with friends and actually laughing and doing something fun does change for me personally.

Participant: I am the opposite though. I like reading, I like school a lot. And social contact is nice, it is great but not too much. Because then you just annoy me (laughing).

Participant: Yeah that is you.

Participant: I would rather just a little space would be great, ja.

Interviewer: Do you allow space for social contact?

Participant: yes definitely you know I have my.. I really have a problem with pretence that is my main problem. I don't like people who pretend. And therefore if I see that you are pretending I would rather that you stay away from me really. So which is why I tend to stick to a certain group of people they are my trusted few. Okay so that is just my issue, so I would rather just spend time studying and doing something where I know I am putting in I am going to reap exactly that. Instead of now spending so much time with you who you know just behind my back and say rubbish so I would rather just ja, not tempt myself to say anything after such.

Interviewer: Okay, and financial stressors , stresses about finance and supporting a family maybe back home. All in all family responsibilities, how do those affect your academic success.

Participant: For me personally I think my parents are trying as much as they could. They meet my needs, yes of course not my wants. Because like you find out okay I would get the money and be like 'jho' I even get angry when they do not send me money on the day that they supposed to send me. But then my dad always says you still know that it is coming there probably is a problem that is why I am not sending it now. But you know it is coming , whereas probably for other kids they do not even know that they are going to get it this month or not. But I think that they do try meet my needs but of course I have unlimited wants you know. Like you want your clothes and everything. So the money I get is not enough for all the things that I want and all of that. But finances, not much of a stress. For me because they try and meet ..

Participant: I would say the same thing because knowing that maybe my parents will be stressing about something then I stress as well and then my mom says you know what you go to school, you let us worry about the money. You do not even have to worry about anything you stay in res and go attend classes. You do not have to worry about your tuition fees being paid. We have to handle all that, that is not your problem but at the end of the day you have to understand that there are kids..

Participant: and I think that it is also about the parents knowing their limit of what they can tell you and what they can't tell you. Because stuff like them not being able to pay my tuition, I don't think that that's something that I really need to know when I am going to be writing exams and writing tests. Couse that is all I am going to worry about.

Participant: Because you are going think oh my gosh why did I go to university I am causing crisis you know..

Participant: and then you blame everything on yourself, which is going to affect the way you feel. And the way you feel does affect how you study and everything.

Interviewer: I see, and are any of you working part-time? And how is that going for you?

Participant: I like it, it very nice.

Participant: oh I also do!

Participant: How do you forget your job, you probably thought when you were being asked about part-time job you thought they meant at Spur or Pick n' Pay or something .

Interviewer: No, any other form of income.

Participant: ohhh that is what you mean. Ok!

Interviewer: What did you think I meant?

Participant: I did cricket scoring. Which I thought was so much fun. But it was kind of tiring because that whole day you have to know that I am not going to do anything else. Like it is tiring, like cricket you have to concentrate you can't miss anything, you have to concentrate and you get tired and I would come back around five and I left at eight, early in the morning because it's a whole day. But I think because I love cricket I understand it so much it makes it so much easier to do it you know? To actually enjoy. But it was really tiring for me.

Interviewer: Did it affect ...

Participant: It didn't affect my studies because the person when you going to score. The person would call you and ask you if you are available or not. Then if I know I am writing the next week I would be like no girl I cant. It really didn't but the money was good, I loved it.

Participant: I love it because it obviously what I am studying so love it. I love what I am studying, I love working there. I just want to learn more every day, even though it is a lot of work but she does not expect us to...because like she will give us like a task...it is me and another girl so she would give us a task and obviously she does not expect us to finish it like now because she knows we have tests and stuff and we only go there to like.. we only work there when we are free and stuff. And another think of being few in class because other lecturers also need help they have a lot of work. So it is tempting but I feel like you should just stick to like one. Because they are all offering but eish you can't just ..it is not about money

Interviewer: And how is being first in your family to go to university or not being first in your family to go to university to further you studies. Like to be a first generation student or not.

Participant: Tjo! Pressure!

Participant I am not the first but the second but it puts pressure on me because every time you find yourself being compared to older siblings which is not fair because she is not me. Because it is like I am at school and my parents know that if something pops up at super sport I am out! Like I am done, it is over! I will do school as a part time thing. Whereas my sister was like this person like 'I need to work, you know I need to pass at school'. So you find yourself being constantly being compared to her like 'Sne, how did this test go?' and I would be like ' agh it went well but know!'

Participant: I think that is the case with me as well. Because my sister. She passes like she concentrates she loves school you know school is a part of her type of thing. Whereas with me, I wanted to do drama, they were like no girl you cannot be doing drama. My dad was like I am old and I need you to study something that I know is going to generate an income for you and I felt like I drama is so me and everything so I studied and then I get compared. Whereas they do not understand that ..whereas they know that I am not studying something I wanted to study. And the person they are actually comparing me to is a person who studied what they wanted to study. So the desire is more on the other side.

Participant: sometimes that puts pressure on you even if , you know when you get a 50% on a test and you are like ' eish man but my sister got a blah blha blha on a her test, she got her degree' and its like it puts pressure on you , you constantly have to be on your feet like you know I need to handle this, and make my parents proud like I cannot disappoint them because my older siblings did not do the same thing

Participant: And then you tell them that things are not going well and they are like not we were all there, we all did it. So if we did it everybody can. So you can't be the first. It is not so difficult.

Participant; To me it is the opposite because I am the last born so like my sister and my brother did not really go to university they went to like a college or whatever, graduated they work now. But still I feel like uhm, especially when I was in first year. Oh my mom put so much pressure on me , because she would always tell me...even when I was doing matric it started when I was in matric or grade 11. Because she would tell like you are my only hope type of thing. She would be like ' eis you are my only hope. My brother and sister passed, like they just passed ..just made it. Especially in matric she would be like you are my only hope so I felt like under pressure because I was like 'tjo if I fail she is going to bite my neck off. I do not need that. I need to concentrate on my own, I just need to be..i don't need any pressure. So ja , fine I passed really well, she was happy I came here but still though she would like ask me 'how was your test, work hard because you are my only.. at least you are that one I can say'. But I didn't like it because I thought it was unfair to my siblings, to my brother and my sister even though they went to a college but still I feel like..

Participant: and I feel like, with me my dad is not so supportive academically but all he cares about is his money. He would be like 'no I am paying, so you must pass you know? . He doesn't , my dad doesn't ask how things are,, how things are going and anything like that. But he only sees when the marks come . he would be like ' why did you get this mark here, what happened' you know he is one of those.. like no you are capable of getting ..if I would get a 63% why did you not get a 70% because you know you are capable of that. Yes it is kind of, it is kind of motivating for him to say I am actually doing something bigger but it is still pressure. You know I always know that anything I do will never be good enough basically because they will always going to want that 2% 'huh you are 2% away from a distinction.

Participant: It is like they expect you to do well and..

Participant: Even if you tell them that it is not that easy, school is

Participant: They will say you did not study.

Participant: and with us, they always say you guys have an advantage of being able to speak proper English. We didn't understand the stuff that we were writing in a test.

Interviewer : On that note, how do you think The school that you attended has an effect on studies.

Participant: well for me my mom is a teacher so I feel like the reason why, because she teaches like a black school like a public school. My sister went there for like a year and then she took her to a private school. I think as a teacher she knew 'I don't want this for my child'. Because she teaches there she knows 'I do not want my child to have this kind of education' because she sees. Even though we are three and she like..basically was a single parent and you know teachers do not get like a lot of money but I feel like she tried her best for us to have like a good education. So it is not about her wanting her children to go to white schools. But it is about her wanting her children to have a good education. So I think the school that you went to really has an impact. For example with our school like academically ... we had this rival school. We were rivals in anything but then we made sure even though they beat us like sports wise we always beat them academically. We were like more academically than them so at the end of the day we all here to learn type of thing.

Participant: I think it helped me a lot and there is something about our syllabus that is a bit advanced so some of the big words that scare other people I am like it is just a word, really guys are you serious? So I am really grateful for where I got to go and I had it tough no lie, but I am so much better now because of that and I can only see that now because I am here. Back then I was really. .not struggling but it was really hard but now it is like yeah I understand why I had to go through that to be where I am now.

Participant: But on the other hand yes the schools that we went to were the better schools than the other schools yes, they were the better schools but then I always feel like the kids who were underprivileged in their school. They are the ones who work so hard and succeed more. They out perform all the kids that went to those big schools you know with big names. Because they work so hard, we take things lightly. Whereas they know that for me to understand it I will take me a month and they actually do it.

Participant : And for you sometimes you are like 'no English is something that you use in everyday life' they tell you, you are going to write a test and you are like 'agh I am going to add in my own words, you know I know these things'. Whereas like a kid who went to a black school they know that they will get there and write that thing in exactly it is written on the book. And that is how you lose mark.

Participant: because when you put your own words you think you know it all but there is nothing there. You use the keywords.

Interviewer: Last question before we finish. Can you talk about your individual characteristics? Like your gender, your age and uhm your race and how it affects your studies. So now talk about how your age as I do you take a gap year and how did that affect you? Did you come straight from high school to university? That is the first question. Second question how about your race and your gender how do those characteristics impact your academic success.

Participant: Ok, uhm ok let start with the gender because it is the only question I remember. With the race and gender. Ok race does not really affect ..i have not heard a lot about it. But the gender , being female I think you know if you struggling with something and there are

guys in your class that you actually know that they are doing well they will not mind helping and I always think it is because you are female do you understand? They do not mind and you are not also going to be scared to ask, I am not, when I see a guy that had got their thing I would be like ' I want to be in your group' they would be like ' no come to our group' and it is going to be fine like that because some guys do not like turning girls down so gender is working for me. It is working for me very properly; because you know you get help and ja all of that there is benefits you know with this gender thing. And then....

Interviewer: Years, did you take a sabbatical year or di you come straight.

Participant: I chilled, I had to chill. Ja I chilled for the, because I matriculated in 2011 and then ..but I was going to go to school 2012 but I only found out that Stellenbosch takes accounting second and third year is taught in Afrikaans. So they only told me then that I do not have Afrikaans and I did not do Afrikaans I did Xhosa. And then I went to Udaps (UWC) and like Udaps (UWC) did not feel like home guys

Participant: What is Udaps?

Participant : UWC, Western Cape and really didn't feel like home and I guess I wasn't fine because of that. And my mom was like ok if you are not fine, come back home. And then we will just see what you do you know and ja and the that year I kind of chilled but then that chilling really said ' girl you can't , I can't do this again' like I was tired. Now January fun, fun and then May June!! Tjooh!

Participant: Jho! Depression!

Participant: and you get so tired like you like this year needs to end already. I need to go and study next year. I cannot be in this house and it even starts to depress you at some point and it is not something nice but ja I guess you get time to think . but I have always known that ok I cannot do drama, I have been told this before so I was just like ok fine then accounting, since I did pass accounting well. And UFS did accept me and I was like ok maybe.

Participant: With me ag race does not affect me. And then gender I do not know because what I am studying is mostly like male based, but besides that like it does not really affect me whatever. And then my age eish same thing because obviously all my peers have graduated or are still to graduate like now in May some people. But then sometimes it annoys me when I go to facebook and like oh my gosh this person went in to matric and they are graduating now that type of thing. But now it really does not bother me anymore. Because well when I was in matric 2010 I applied here and they accepted me and stuff Koos and everything was fine. I know Huis Koos and everything was planned , I was going so excited and then ag and then beginning of the year uhm my mom as I said we are like three and my sister , she was not really doing well and then now that affected my brother because now we are two years apart. So if my sister slacks then it means maybe another year, meaning my brother now is also in university and now me! So my brother and I were talking he said no you go, I said no you are already there so why don't you just finish and then I will stay I do not mind. And then fine we agreed and then we agreed that ok he should go finish off and the I will go the following year.

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So ja I stayed with my mom and it was just us two. And then I applied again and then they accepted me again I kept my student number. And then like Siphe said around June it is depressing. At first it is nice like no tests no exams. You wake up and do whatever, I got my licence then everything but still it is so depressing I don't know. I feel like when you take a gap year you should know because driving school is only like.. do something even if you work at Wimpy or something. It is so depressing sitting there doing nothing

Participant: And another thing is the finances because you are at home what do you need money for basically that is the perception parents have in their minds. That is what they think and you are thinking ok like I want to go to the mall but I can't because I have to ask for the money I have to wait for someone to come pick me up in order for me to go. You are so depended and it is annoying like it gets so annoying like...

Participant: So then when I got here and then I found out that my degree was four years and I was like jhoo, first of all I took a gap year and my degree is four years that time people I matriculated with are doing 3 year degrees so they are going to graduate way before me. I am going to graduate two years later. But then that was me like beginning of the year when I came here and stuff. But then I realised that ag man we all have different chapters in life, I mean stories and just because you are on chapter 25 does not mean that is also have to be in chapter 25. And then it actually made sense to me that wow! I really think that God really has like, he plans things ahead. Because I sat and I looked at my friends and I was like these are my friends and I really like my friends when I was first year I was so involved in church. And then I asked myself 'what if I actually came last year, what I forced and I came last year? I wouldn't have these friends who you know influence me to do like church things and what friends would I have had'. And then I looked at the people who ..second years and I was like jho most of these second years I see the type of thing. They would probably be my friends and probably partying and things now. I was like ok I am just going to take it as it is like day by day. All I know is I am here now, I am not going to sit and think about oh my gosh last year. Like now even when people graduate I am actually am happy for them like my friends I "like" on facebook I genuinely am happy for them because I know that my time is coming. My time is coming, it does not matter how, but my time is coming so ja.

Participant: Ok me gender race no I wouldn't say it affected me. I would say like first year I never took a gap my parents would have never allowed it so first year I did Bsc but when I was doing Bsc.

Participant: Here?

Participant: South campus, she does not know I went to South Campus she calls herself a friend

Participant: I knew you went to South campus!

Participant: Ok I did Bsc and stuff but you know even though I was acting like I was enjoying it you know Bio ,Maths but at the same time I come back and I would say oh my goodness is this what I really want to do? Because a part of me is like it is something I cannot

deny a part of me will end up in the soccer world someday so at first I was like. Because with Nelle we applied for the same thing, he did Bsc microbiology and I just did plain Bsc. At first we had applied for medicine but you know eish our results were not that great. So we were like because we would something but we would be like we want that medicine what is this Bsc because at first he had applied for Bsc and the he called me saying that he had changed to microbiology now. But I was like I a sticking to whatever they give me. But then I again we would just chill and we would say is this what we really want to do? And then following year which was 2014 I came here and I met with Mertjies or something, ja some Bsc person you should know her. Then she is like ok let me register you. Which Bsc thing do you want to do? I was like eish I was like uhhh I think I want to change and I had to guys because at first I wasn't here for medicine at least I would know that if I get medicine and be a team doctor sometime. Bsc what am I going to end up with? Where am I going to work at a soccer stadium counting test tubes and whatever. So Mertjies is like how is psychology? I am like uhm can we try that? Because I wanted something that at the end of the day it can work out both ways. I know I can be a clinical psychologist and just work at a clinic or a hospital or school or something. Whereas with Bsc I was like where can I possibly work. And I was like it is fine I want to drop Bsc and I dropped it January last year I dropped it. It was hard telling my parents that I dropped it because.

Participant: Bsc jhoo it is top there!

Participant: and I was like I called my mom and I was like 'Mom I am not going to continue with Bsc'. And plus with me I passed Maths but I was not a maths student I am not a maths student and I not fascinated by numbers I learned to pass because I loved it so much. But that was like ..i told my parents that I am dropping it and if it happens in my future and then I asked some lady from UKZN like I was sending them emails I was like ok ..i even sent them emails here and I was like I actually wanted to do medicine but you guys told me about a Bsc thing. Then she was like no it is fine just bring your...you are allowed to bring your psychology results if you feel that they are good to take you to medicine and stuff. But then I was like no this is going to be a hustle again so I was like you know what it is fine I will stick to psychology and I am going to continue with that but it was kind of a hustle and it affected me last year I was like ' jho I am not sure anymore what I want to do and you know'. But over the time I was like ag I got this now you know everything is chilled everything is settled, ja get ready to see me at super sport.

Participant: Gender uhm no, age...uhm race uh no and then age? Ok I took a gap year because I was working for my dad. And my dad said no you are too small and too young so you can't do that, just wait a bit, just wait and then you can work for me and he just made it sound really nice. And I was like ok fine because my mom is never really home so he kind of feels privilege to like my baby girl, so he is just like no just wait and then next year you can go. So I spent that whole year working for him. Which was cool but like you know I feel now it was a good thing because now I , people tell me I am bit too mature but I really feel like I am in a good space because of that gap year I got to learn a lot and what not. So ja that was great! And then what else?

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Participants: That is it !

Interviewer: Ok anything else?

Participants: I know Siphe wants to say something but no!

Participant: Huh? I have nothing to say.

Interviewer: ok guys thank you this is the end of our session

Appendix F: Turn It In Report

Full document

ORIGINALITY REPORT

% 13	% 8	% 7	% 6
SIMILARITY INDEX	INTERNET SOURCES	PUBLICATIONS	STUDENT PAPERS

PRIMARY SOURCES

1	etd.uovs.ac.za Internet Source	% 1
2	Submitted to The University of the South Pacific Student Paper	% 1
3	nces.ed.gov Internet Source	<% 1
4	Submitted to University of KwaZulu-Natal Student Paper	<% 1
5	www.che.ac.za Internet Source	<% 1
6	media.proquest.com Internet Source	<% 1
7	Submitted to Manchester Metropolitan University Student Paper	<% 1
8	Wouters, Sofie, Hilde Colpin, Jan Van Damme, and Karine Verschueren. "Endorsing achievement goals exacerbates the big-fish-little-pond effect on academic self-concept", Educational Psychology, 2013.	<% 1