



The influence of acculturation strategy and school background on academic performance and adaptation to university

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Declaration

The influence of acculturation strategy and school background on academic performance and adaptation to university

I, Carlista Mosenene declare that this research report is my own work and is authentic and original unless clearly indicated otherwise and, in such instances, full reference to the source is acknowledged.

This research report is submitted in partial fulfilment of the degree of Master's in industrial/Organisational psychology in the faculty of Humanities, University of the Witwatersrand, Johannesburg. It has not been submitted before for any other degree or examination at this or any other university.

_____MC Mosenene_____ _____25 August 2020_____

Carlista Mamolisana Mosenene

Date:

Signed at Johannesburg

On the __25__ day of ____August_____ 2020

Abstract

The Apartheid regime ended 26 years ago, however, the students that were not directly impacted by Apartheid continue to suffer its consequences. South Africa's department of education has succeeded in assisting students from disadvantaged schools to enroll into higher education institutions through funding mechanisms. However, students from disadvantaged schools often face acculturation and adaptation to university challenges. Furthermore, they experience high academic failure and university drop out. The objective of this study was to investigate whether these challenges are due to school background. The overarching aim was to understand student high failure rate and university drop out. This aim was achieved by taking into consideration the four research questions aimed at understanding the relationship between the study variables. The school background is categorized into two types, namely, low quintile school background (quintile 1 to 3) and high quintile school background (quintile 3 to 4). Acculturation strategy was assessed using a measurement created by the researcher incorporating Berry's model of four acculturation orientations (categories), namely, integration, separation, marginalisation and assimilation (Berry, 1997). The Student Adaptation to College Questionnaire (SACQ), developed by Baker and Siryk (1999), assessed adaptation to university. Academic performance was assessed using several indices, including student's scores on the midyear examination, ratings of their performance and English proficiency. This was a quantitative study, cross-sectional non-experimental research design. The data was analysed using a one-way MANOVA, one-way ANOVAs, a crosstabulation analysis and independent sample t-test. A sample of 307 first year students from the University of the Witwatersrand completed the questionnaire online and were asked to indicate the school they attended before they enrolled to university. Only the Black African participants were found to have attended low quintile schools (quintile 1 to 3), therefore, only this group was used in the analyses relating to school background. Unexpectedly, the relationship between school background and adaptation to university using the SACQ was found not to be significant. However, the results indicated that the acculturation orientation of students from high and low quintile schools differed. The results also indicated that the students' academic performance varied according to their acculturation orientation and school background. Recommendations made from the study include; creating a specific tailored programme for tertiary students from two different school quintile backgrounds, educating and implementing ways of teaching that encourage healthy acculturation and acceptance of diversity and frequent pre-exposure of the university life, most especially for students from disadvantaged school background.

Dedication

I want to dedicate this research report to every human being that feels their situation is impossible to change and those that feel like a certain task is impossible to accomplish. Be rest assured that nothing under Earth is beyond human capacity, know you are enabled and capable. To every disadvantaged student that feels their background does not qualify them, you have been made qualified and enabled.

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CHAPTER 1: INTRODUCTION

1.1 Chapter introduction

This chapter will discuss the significance of the current study. It does this by providing; the background of the study, research rationale, research questions and research aim. Furthermore, the chapter provides an overview of the research methods and an overall outline of the study.

1.2 Background of the study

Higher education accessibility for every student from different economic backgrounds is a worldwide current liberal mandate (Alexander, 2014; Department of Higher Education and Training, 2019; Msila, 2007; Roman, 2014; UNESCO, 2016). In South Africa during apartheid, White people were prioritised in accessing higher education while other racial groups such as African Black, Coloured and Indians were marginalised (Council of Higher Education-CHE, 2013). However, over the years post the Apartheid regime access to and participation in higher education among previously marginalised groups has globally improved (Ali, Zubair, Hamid, & Awais, 2013; DHET, 2019; Katsikas & Panagiotidis, 2010; Marshall & Case, 2010; Mudhovozi, 2012; Msila, 2007; Roman, 2014; Sommer & Dumont, 2011; UNESCO, 2016). The enrolment of Black African students has increased by approximately 80% (Department of Higher Education & Training, 2019; Roodt, 2018). Previous research predicted that there was going to be an increase in inclusion of disadvantaged groups in higher education (Council of Higher Education, 2016; Sennett, Finchilescu, Gibson, & Straws, 2003). A study conducted by Roman (2014) indicated that North America and parts of Western Europe also experienced high inclusivity, as more than 60% of young people from low socio-economic backgrounds have been enrolled in higher education.

Despite the global improvement of the overall demographic inclusivity in universities, studies report the prevalence of challenges which include poor academic performance and university withdrawal. This is primarily evident on low-economic background students who often come from the previously marginalised societies (Orlov, Pazukhina, Yakushin & Ponomareva, 2018; Roman, 2014; Roodt, 2018; Scott, Yeld & Hendry, 2007). Academic success rate is significantly unequal between the White and the African Black students. On average, academic performance of White students is 10 percent higher than that of African Black students (Department of Higher Education and Training - DHET, 2019). Research also indicated that there is a low graduation and completion rate within South African public universities

compared to higher educational systems in other similarly developed countries (CHE, 2013, 2016; Roman, 2014; Scott et al, 2007).

Low completion rate is primarily true for African Black students from low economic background, first generation university students and students with disadvantaged educational experiences (Northedge, 2003; Roodt, 2018; Spaull, 2013b). Roodt (2018) supported this argument by indicating that one of the factors that influence low academic performance for African Black students is the racial and economic segregation which result in stress, less familiarity with information and skills necessary for acculturation, adaptation and future success. DHET (2019) and Roman (2014) also attested that African Black students on average, have minimum access to advanced school resources, such as computer facilities and counsellors to assist them in preparation for post-secondary education or university experienced family member. Therefore, although there is inclusivity of students in universities, they face various challenges that are primarily due to their secondary school background.

According to Roodt (2018), the secondary and higher education discrepancy in students' educational development, in South Africa, is strongly rooted in the country's history which is characterised by high inequality. Research indicates that the discrepancy is the aftermath of apartheid. The discrepancy has also resulted in a continued transformation to re-imagining a new related educational system and experiences, by the introduction of the Revised National Curriculum Statement and student support programmes (Heystek, 2011; Roodt, 2018; Van Dyk, Van de Poel & Van der Slik, 2013). Student support programmes were introduced post the Apartheid with the essential mandate of providing students from disadvantaged school background a fair chance of success at universities (Sennett et al., 2003).

Although, there is implementation of student support programmes, studies show that, for students from low economic background, the challenges of low academic success continue to prevail (CHE, 2013; Msila, 2007; Roodt, 2018). However, some studies also acknowledge both students' internal incompetence and external challenges as some of the factors that can hinder academic performance. Internal incompetence includes lack of cognitive ability or motivation. The reported external challenges include family and cultural background (Sommer & Dumont, 2011; Stephen, Welman, & Jordaan, 2004).

Findings from a study conducted by Roman (2014), on students' failure in an academic environment, in a European country indicates that higher education failure is a multifaceted phenomenon that is dependent on numerous factors. The factors are; social, educational, social

and economic pressure or difficulties, technical disciplines, teachers' shortage and personal factors (Roman, 2014). Acculturation and adaptation compromise both personal and social factors that have an impact on students' academic performance (Chataway & Berry, 1989). Acculturation strategy is defined as the assumed adaptive behaviours and attitudes by individuals from a non-dominate culture in a dominate culture (Berry, 1990). Smit (2012) stated that acculturation is a common occurrence in similarly developing countries such as South Africa. As a result, due to an increase in higher education accessibility, a mandate was established over the past years to facilitate students' acculturation and support their adaptation to new learning environment (Smit, 2012). This mandate has been successfully implemented, however, due to aftermath of historical challenges, students' academic success in South Africa remains highly skewed and adjustment remains a challenge (Bojuwoye, 2002; Habibah, Noordin & Mahyuddin, 2010; Roodt, 2018; Smith 2012; Spaul, 2013b; Van Dyk, et al., 2013).

1.3 Research Rationale

The implementation of various measures to address educational challenges faced by students, responds to the demands associated with an increase in the number of students, especially from inadequate schooling, enrolling in higher education (Smit, 2012). According to Smit (2012), the above, increased number of students further increases concerns around the gap in acquired skills and ability to conceptualise knowledge, between students from disadvantaged and advantaged school background. Post-apartheid, the Department of Basic Education (DBE) announced five quintile school levels based on their socio-economic statuses. The quintiles range from quintile one schools which are the poorest to quintile five schools which are the least poor (Jansen & Taylor, 2003; McLaren, 2017). According to Kellaghan, (2001) and Hlalele (2012), the non-fee paying schools (mostly quintile one to three) are frequently associated with low socio-economic status and this result in pupils receiving poor quality of education. On the contrary, fee-paying schools (mostly quintile four and five) are frequently associated with high socio-economic status that has potential to enhance pupils' learning process (Kellaghan, 2001; Spaul, 2013b).

Kellaghan (2001) further elaborated that students from non-fee paying schools are likely to be subjected to learning conditions that are not suitable for academic success. These conditions include, lack of resources such as computers, laboratory equipment, inadequate learning of literacy and numeracy due to lack of teachers and low quality of teaching (Gardiner, 2008: Heystek, 2011; Kellaghan, 2001). However, students from fee paying schools are more likely

to succeed academically due to the secondary school quality of education that is enhanced by; adequate resources and qualified competent teachers (Ali et al., 2013; Kellaghan, 2001). Roodt (2018), further stated that, “students do better if they lived in households with running water and flush toilets,” implying that affluent background can be an indication of good school background and a predictor for good academic performance. The lack of skills and conceptualising knowledge can affect students’ social capital abilities. This may result in students adopting an orientation that assumes they are subjects of a marginalising acculturation. This orientation inevitably impacts their adaptation to university and have negative impact on their academic performance (Sommer & Dumont, 2011).

This research study focused on the different acculturation orientations of students considering their various school backgrounds and the influence this has on students’ academic performance and adaptation to university. The current study’s focus is on University of Witwatersrand first year students from school backgrounds of both fee paying and no-fee paying schools. This was based on school quintiles (Advantageous and disadvantageous school backgrounds). This specific focus provides the current study with a unique and unusual direction. Frequently, scholars mainly focus on the aspect of deficiency on the student’s psychological strengths or somatic nature difficulties and capabilities as causes for academic failure (Orlov et al., 2018; Roman, 2014; Sommer & Dumont, 2011). The above studies do not fully acknowledge the impact that school background has on students’ academic success. However, they view academically challenged students as lacking desirable cognitive characteristics that enable academic success.

The current research takes into consideration, both groups of students from fee-paying and non-fee paying schools, contributing to the body of knowledge on academic success. Whereas, most studies focus on non-fee-paying schools (Marshall & Case, 2010; Sennett et al., 2003). The current study will also closely explore acculturation orientation among a sample with the same nationality indicating a contribution into the acculturation phenomenon. This knowledge will potentially inform policies, programs, as well as adding to what already exists to ultimately improve the experiences of first-year students at university.

1.4 Research questions

This research study will answer the following questions:

- Does acculturation orientation have an impact on academic performance and adaptation to university?

- Is there a relationship between school quintile and acculturation orientation?
- Does school quintile have an impact on academic performance?
- Does school quintile have an impact on adaptation to university?

1.5 Research aim

It is acknowledged that the impact of apartheid still affects the education system in South Africa. This study aims to investigate whether academic failure, particularly among Black African students, may be associated with the education delivered by schools in low-economic communities. It is argued that it is not only the standard of education within these schools but the socio-cultural differences between the schools and universities that contributes to failure and drop-out rates.

1.6 Research methodology

The research design of this study is quantitative, cross-sectional non-experimental research aimed at understanding the influence of school background on acculturation strategies, academic performance and adaptation to University. This study happened over a short period and the participants were only tested at one point in time. For data collection, a sample of 307 first year students at the University of Witwatersrand completed an online survey with questionnaires.

1.7 Outline of the study

The structure of this research report comprises of six chapters. Chapter one provides the background of the study, the rational and significance of the study as well as the research questions and objectives. Chapter two provides extant literature and previous studies related to the current study in order to gain further knowledge on the topic. Chapter three describes how the study was conducted and what instruments were utilised, essentially providing the methodology of the study. Chapter four provides results obtained through data collection and implementation of statistical tests. Chapter five includes the discussion of statistical results, theoretical and practical research implications. Chapter five also provides the limitations and recommendations of the study. Chapter six is the conclusion and contributions of the study.

1.8 Chapter summary

This chapter presented the foundation of the current study. The chapter provided; the study background, the rationale and the significance of the study, research aim, research

methodology, and a brief overview of the research report. The following chapter will discuss various literature that exists on the topic related to the current study and discussion of the insights on the different variables under investigation.

CHAPTER 2: LITERATURE REVIEW

2.1 Chapter introduction

This chapter discusses the reviewed literature in order to; show the known knowledge in relation to the topic of this study, identify the existing gap and demonstrate how this study will clearly contribute new knowledge. This will be achieved by primarily understanding school background and its ramifications. Additionally, the chapter will provide an understanding on acculturation strategies, academic performance as well as adaptation to university. Lastly, this chapter will provide a conceptual framework.

2.2 South African education background

Numerous scholars view education as the most significant aspect of every human being, they have also indicated that its provision has improved given the South African historical context (Kwesiga, 2002; Mbiza, 2018; Mudhovozi, 2012). When considering the historical context of South Africa regarding education, there is an observed democratisation. Democratisation is explained as an inclusivity of increased number of pupils into higher education from which they were previously excluded due to low socio-economic affiliation and racial marginalisation (Cross & Carpentier, 2009; DHET, 2017). The educational system in South Africa originates from a past in which education was utilised to divide and construct racial and financial power ideologies, instead of uniting and empowering learners (Roodt, 2018; Taylor et al., 2008). Emeagwali (2005) and Van der Berg (2007) also attested that during the apartheid regime, the quality of education was served differently according to race and reinforced inequalities in schools by favouring one race over the other.

The inequality was reinforced in secondary education by the creation of Bantu education, which was formed prior 1994 as an attempt to limit development, distort knowledge and control learners' intellect (Jansen & Taylor, 2003; Msila, 2007). In attempt to eradicate the Bantu education system, South African education introduced Outcome-Based Education (OBE), also known as Curriculum 2015 (Msila, 2007; Taylor et al., 2008). Some of the OBE objectives was to create a system that is founded on democracy, justice and non-racialism, to equip learners with the ability to make decisions, solve dynamic problems and adapt to environments in order to be ready for post-secondary schooling (Taylor, Muller, & Vinjevold, 2003; Taylor, Fleisch & Shindler, 2008). However, it was not long since OBE was introduced that it was condemned

as ineffective in society as the government had envisioned, therefore, it was revised (Taylor et al., 2008).

The Revised National Curriculum Statement (RNCS) was then introduced to replace the OBE curriculum (Msila, 2007). RNCS is a comprehensive system introduced to create an integrated national framework for learning achievement and create further access and flexibility within education (Msila, 2007; UNESCO, 2016). Moreover, RNCS enhance the quality of education and training while readdressing the past discrimination in education and contributing to each learner's personal development (Msila, 2007; Roodt, 2018). Msila (2007) also indicated that Inclusive Education (IE) was also formed as a means to address the needs of all learners by decreasing the barriers caused by primarily disability or special needs. The above illustrates the attempts initiated by the department education to create an educational system that is inclusive and serves the needs of all South African learners, either historically disadvantaged or advantaged. To date, South Africa has one of the prominent higher education sectors with more than a million of students enrolled in the universities, colleges, and universities of technology across South Africa from various demographic and socio-economic backgrounds (Fisher & Scott, 2011; Mbiza, 2018). Lewin (2007) and Kwesiga (2002) also attested that this educational system development led to an increase in the number of learners from various schools enrolling for higher education.

Using the national census of 2011, Spaull (2013b) shows that, over the years, there has been an improvement on the basic education enrolment. The national census report stated that, among the South African population groups, the percentages of learners who completed high school by 2013 were; Coloureds (32.6%), Black African (35.2%), Indians (61.6%) and White (76%) citizens (Spaull, 2013b). However, there was low higher education enrolment. Out of all learners that completed high school, only 41% enrolled into higher education (Spaull, 2013b). Stats SA (2019) and Wolhuter (2014) also illustrated that secondary education enrolment ratios were not the same as those for higher education. The difference indicated that there is an improvement in enrolment for secondary education; however, higher education enrolment remains feeble compared to secondary completion rate. Although there is an increase in the number of pupils enrolling in higher education, the low higher education enrolment and completion rate against the secondary school completion rate might suggest that most learners do not pass well enough to be accepted or are experiencing socio-economic challenges such as lack of funding to remain in higher education (Mbiza, 2018).

According to Stats SA (2019), in 2016, 610 178 students wrote matric but only 158 891 of these students were eligible to register into the higher education institutions. This indicates that higher education has not improved in comparison to basic education. Furthermore, Cloete (2016) indicated that in Africa, higher education participation rate is still at stage one to stage two according to the World Economic Forum. South Africa participation rate is 16%, Botswana is 20% and Mauritius is 26%, whereas countries such as South Korea, Finland and United States have higher education participation rates of more than 80% (Blignaut, Els, Laubscher, & Nieuwoudt, 2015; Cloete, 2016).

Nonetheless, post 1994, South African government, did not only bring about accessibility of education but also empowered the implementation of the vision through funding of both basic and higher education (Roodt, 2018). In 2015, 15% of South Africa's total budget was spent on education, this was approximately R213.7 billion (Mbiza, 2018). When some of the advantaged schools charged fees, disadvantaged schools did not charge fees yet received more funding from government in order to ensure fairness and to compensate for the past inequality (McLaren, 2017; Roodt, 2018; Taylor et al., 2008). This government support aimed at ensuring that even learners whose parents could not afford education were able to enrol for both basic and higher education (McLaren, 2017).

However, since 1994, regardless of the funding that was put into education, World Economic Forum 2016 ranked the standard of South African basic education 126th out of 138 countries (Mbiza, 2018). According to Wolhuter (2014), the financial injection put in education is extremely high, but the output is extremely low and does not provide equal returns in terms of the quality of the education received, physical facilities and quality of teachers. This suggests that regardless of the extreme measures put in place to eradicate the apartheid legacy, the aftermath remain prevalent, basic education remains a challenge and inevitably impacts higher education success. Some authors blame the current challenges in the education system on corrupt South African leadership (Langa, Ndelu, Edwin, & Vilakazi, 2017; Mbiza, 2018; Roodt, 2018)

Furthermore, South Africa has initiated numerous school developments across its nine provinces, but there are still approximately 500 schools in provinces such Western Cape and Eastern Cape with poor infrastructure and insufficient resources (Roodt, 2018). The gap in education standard and inequality between school quintiles remain evident (Mbiza, 2018; Mudhovozi, 2012). On the other hand, some scholars claim that South African higher education

is performing better and continues to make prosperous progress and competes globally (DHET, 2019; Spaull, 2013b). This growth in the higher education is deemed to be a global occurrence; other European and American countries are also experiencing inclusive progress in higher education (Altbach et al., 2009; Roman, 2014; U.S. Department of Education – U.S.DoE, 2017). However, Spaull (2013b) and Wolhuter (2014) claim that although South African higher education competes globally, it is not performing well compared to other African Countries such as Swaziland and Tanzania. One renowned university rector took the argument further to express how shameful he was of South Africa because of its education system (Wolhuter, 2014)

South African education system consists of two national departments, firstly, the Department of Basic Education (DBE), which is mainly responsible for primary and secondary schooling, secondly, the Department of Higher Education and Training (DHET), which is mainly responsible for tertiary education and training (Roodt, 2018). The current research report will evaluate the educational background received at the Department of Basic Education (DBE) level and its influence on students at the Department of Higher Education and Training (DHET) level. The basic education consisted of five school level classifications, namely from quintile one to quintile five.

2.3 School classification

Secondary education serves the ultimate purpose of adequately preparing pupils for post-secondary schooling. However, due to the legacy of apartheid, some schools lack adequate facilities to simplify this secondary to higher education transition (Shepherd, 2011). Studies indicated that the quality of education in South Africa varies from school to school, primarily in terms of the support, resources and educational quality provided to learners (Ball, Thames & Phelps, 2008; Bojuwoye, 2002; Nel, Troskie-de Bruin & Bitzer, 2009; Roodt, 2018; Spaull, 2013b). As a result, secondary schools continue to produce majority of students who find it challenging to succeed in higher education (Cloete, 2006, 2016; Mbiza, 2018; Nel et al., 2009). The increase in skill requirement gap found between secondary school and university is intensified by inequalities that are prevalent in the basic school education system (Mbiza, 2018; Roodt, 2018; Thomas & Quinn, 2007). However, in attempt to deal with the socio-economic challenges and the inequality in education, the government introduced certain measures.

In 1998, the quintile system as part of the National Norms and Standard (NNS) was introduced in the South African education system; this was to ensure equity in education where majority of learners live in poverty (Mestry & Ndhlovu, 2014). The DBE announced five quintile groups

based on the socio-economic factors in various environmental school surroundings. The national poverty ranking of school quintiles ranked quintile one as the poorest, disadvantaged quintile while quintile five was characterised as the least poor and advantaged quintile (Mestry & Ndhlovu, 2014). Majority of schools classified as quintile one, two and three are fully subsidised by the government whereas, schools classified as quintile four and five are partially subsidized (McLaren, 2017). Several socio-environmental factors such as unemployment rate, illiteracy rate, infrastructure, number of homes made in brick, wood, and iron sheeting in specific areas, were considered when classifying schools into quintiles (McLaren, 2017). Schools classified as quintile one, two and three have high rate of unemployment and illiteracy, iron sheeting houses and inappropriate infrastructure whereas schools classified as quintile four and five have the opposite with brick housing (McLaren, 2017). Although the above quintile system is relevant to the study, it is no longer used but has been replaced by a fee paying and non-fee paying system.

As an attempt to further afford disadvantaged background learners an education, the government introduced two policies namely, fee paying and non-fee paying schools policy (Fleisch, 2008; McLaren, 2017; Mestry & Ndhlovu 2014; Taylor & Yu 2009; Van der Berg, 2008). Quintile one, two and three schools are classified as non-fee paying schools and quintiles four and five schools are classified as fee paying schools (McLaren, 2017). According to Heystek (2011), the non-fee school's policy was introduced in 2007 to ensure schools do not charge disadvantaged learners school fees. This is in line with the Constitution, which stipulates that regardless of affordability, every citizen have a right to basic education (Mestry & Ndhlovu 2014). The fee-paying schools charge school fees in order to supplement their revenue, however, the government decides on the annual amount of fees charged (Heystek, 2011).

The fee-paying schools include certain quintiles mostly located in the cities, few in townships and suburbs (DBE, 2011). These schools are mostly characterised by enough resources, infrastructure and high English language proficiency (Shepherd, 2011; Van der Berg, 2008). For the purpose of this research study, the terms; fee-paying schools, advantaged schools or high quintile schools, are used interchangeably. Mestry and Ndhlovu (2014) further elaborate on the second sub-system, the non-fee-paying schools, by stating that these schools are mostly located in the rural areas. Mostly, they are schools characterised by a lack of resources, disadvantaged surroundings and low levels of English proficiency (Fleisch, 2008; McLaren, 2017). For the purpose of this study, the terms; non-fee paying, disadvantaged schools or low quintile schools are used interchangeably.

Secondary schooling in South Africa includes a majority of historically disadvantaged students, this consists of students from rural and township schools, low quintile schools (Mestry & Ndhlovu, 2014; Van der Berg, 2008). Malhoit (2005), Redding and Walberg (2012) further stated that disadvantaged schools in rural areas offer a limited and less intensive scope of the curriculum. Malhoit (2005) defines rural schools as faced by challenging characteristics such as isolation, long distances between places and scarce populations. Malhoi (2005, p.10) adds that, “These challenging characteristics include lack of transportation, access to goods and services, decreased ability to recruit and retain teachers, low level of parental participation, low level of student participation in extra-curricular activities, and lack of proximity to entertainment, services, shopping, and other amenities that people in other communities take for granted”. Due to these characteristics, it is assumed that students might experience acculturation stress when they migrate to a university based in a city. Acculturation stress is defined as a feeling of uneasiness, the aftermath of an individual interaction with a new cultural environment and decision-making engagement (Berry, 1997).

According to Aref (2011) students from disadvantaged schools also demonstrate limited abilities to adapt to the university. These include low proficiency in writing, numeracy, reading and conceptualising knowledge (Aref, 2011). Regarding literacy and numeracy abilities within the National School Effectiveness Study (NSES) in South Africa, it is stated that grade 3 learners in advantage schools perform better compared to grade 5 learners in disadvantaged schools (Taylor & Yu, 2009). Therefore, by the early primary school, learners in disadvantaged schools already possess an educational background that is inadequate. This continues into secondary education and creates higher education academic difficulties (Gardiner, 2008; Roodt, 2018; Taylor & Yu, 2009).

In contrast, the advantaged schools in cities are mostly associated with; relative affluence, access to advanced technology, library facilities and good infrastructure with sufficient social services. These are all directly opposite to disadvantaged schools (Balfour, Mitchell & Moletsane, 2008, Fleisch, 2008; McLaren, 2017; Mestry & Ndhlovu, 2014). The disadvantaged schools experience poverty and low access to technology with limited internet, insufficient infrastructure and lack of library facilities (Hlalele, 2012; Fleisch, 2008). Hlalele, (2012, p. 113) further elaborates, “Poverty, fiscal incapacity, low levels of adult education, and low levels of learner achievement run in the same mutually reinforcing circles in rural areas”. Given the two different environmental surroundings experienced by students, it is therefore inevitable for them to have unique experiences in higher education.

A report on higher education and skills in South Africa compared the five school quintiles and educational level achievement in higher education (Stats SA, 2019). The study had a total of over a million participants who achieved their higher education qualification. The majority obtained bachelor's degrees (672 195), followed by higher diplomas (583 554) and lastly, honours degrees (508 108). Only 33.7% of the population from lowest quintile had higher diplomas and 33.7% had bachelor's degrees. Participants from richest household income quintiles had bachelor's degrees (32%) and honours (30%) while participants from quintile four (4%) and five (6%) mostly held doctorate degrees. This suggests that quintile background is a predictor for academic success or the level of education one achieves.

However, Nelson Mandela pointed out that rural or disadvantaged societies have immense potential to form a better future for themselves (McLaren, 2017). This presents a different view of students from disadvantaged schools. Similarly, Hlalele (2012) states that rural societies are also characterised by unique positive attributes that are critical for survival. Although the background comes with the feeling of being inferior, it also has positive attributes that are critical for survival, this includes; resilience, a clear goal to succeed due to home dependency and a drive to overpower poverty (McLaren, 2017; Redding & Walberg, 2012). Malhoit (2005) and Howley, Rhodes and Beall (2009) stated that students from disadvantaged schools can still have better academic success in higher education due to resilience formed through disadvantage.

2.4 Education system concerns

2.4.1 Educators challenges

As discussed above, studies have reported that funding is not primarily the reason for challenges faced by the South African education system (Briggs & Wohlstetter, 2003; Cloete, 2009; Mbiza, 2018; Roodt, 2018). Other countries spend on education as much as or less than South Africa does. Although South Africa spends a relatively big portion of its GDP (6.4%) to education, compared to European countries that spend less (4.5%), its education system continues to experience numerous challenges (Mbiza, 2018). Compared to funding in the South African education system, incompetency and lack of teachers appear to be the biggest challenge (Ball et al., 2008). This demonstrates that the lack of and incompetency of the available educators is one of the prominent concerns in the South African education system (Ball et al., 2008). These negatively impact the quality of education provided in basic education. A study conducted in 2007 on South African schools' statistics reported that the teacher and learner

ratios in primary schools' averaged at; 1:18 in quintile five, 1:24 in quintile four, 1:27 in quintile three and 1:39 in quintile two and quintile one schools (Spaull, 2013b). This indicates a lack of teachers especially in disadvantaged schools, particularly in the remote areas of South Africa as per quintile one and quintile two locations.

The study further reported that 96% of teachers in advantaged schools had teaching certificates whereas only 15% of teachers in disadvantaged schools were certified teachers (Spaull, 2013b). This strongly suggests the different types of education provided to learners, the quality thereof and the outcomes obtained. Boughey (2007) supported the above by stating that secondary school pass rate and graduation rate for disadvantaged schools was half the pass rate for advantaged schools. A study conducted in 2007 regarding the education system, assigned grade 11 and grade 12 teachers a similar test to that of learners, this test included calculation of fractions and ratios. The results were shocking, as 79% of teachers scored below the expected level of learners. Furthermore, when compared with other countries, an average 14-year-old in Singapore and South Korea performed better than these teachers (Spaull, 2013b).

Over the years, provinces such as Gauteng, Western Cape and Free State have diligently invested in improving their district education systems (Spaull, 2011). Nonetheless, from a holistic country view, the Southern and Eastern Africa Consortium for Monitoring Educational Quality (SACMEQ) results suggested that money was not the main contributor to education system challenges (Hungu, Makuwa, Ross, Saito, Dolata, van Capelle, et al., 2011; Spaull, 2011; Spaull, 2013b). The South Africa's 2013 statistics general household survey indicated that teacher related challenges are the most prominent in the disadvantaged schools and this impacts the quality of education provided in classrooms and subsequently creating complexities at university (Spaull, 2013b). The DHET (2017) attested that although there is high rates of matric completion, majority of those students do not end at university due to high university academic requirements.

2.4.2 Quality of education

In 2015, the Organisation for Economic Co-operation and Development (OECD) conducted a study to determine how well learners performed in maths and science. There were 76 countries under study and South Africa was ranked the 75th worst education system, followed by Ghana which was ranked 76th (Roodt, 2018). Singapore was ranked the best education system in the world; it was followed by other Asian top five countries such as Hong Kong, Japan, South Korea and Taiwan (Roodt, 2018). African countries such as Botswana, Morocco and Tunisia

were respectively ranked 70th, 73rd and 64th (Roodt, 2018). However, when South Africa is compared with other Southern African countries, the results looked slightly better. Another aspect of the quality of the education lays in English proficiency. English is the primary medium of instruction in South African universities and necessary for academic success as it predicts understanding of educational constructs.

The SACMEQ report conducted in 2013 regarding learners' reading and understanding of maths indicated that South Africa had slightly improved (Spaull, 2013b). On learners' reading, South Africa moved from ninth to eighth, while in mathematics from ninth to sixth rating (Spaull, 2013b). Spaull (2013b) added that in 2013, the average South African learner scored higher or equal to the SACMEQ average scores. A study conducted in the United States of America regarding the effects of poverty on academic achievement, indicated that disadvantaged school background had significant lack of resources. This negatively affected the quality of education provided and academic success achieved by students (Malhoit, 2005; Lacour & Tissington, 2011). The study further reported that students from advantaged school backgrounds receive high quality of education compared to students from disadvantaged school backgrounds (Lacour & Tissington, 2011). This is an indication that the quality of education in South Africa needs to improve drastically to enable equal changes for every student to succeed at university.

2.4.3 Funding of higher education

Although some scholars, mentioned above, do not view funding as a significant challenge in the education system in comparison with educator challenges, DHET (2017) indicated that lately majority of individuals do not consider completion of secondary education as a maximum achievement as found compared to the past. Therefore, there has been a growing demand for education and inevitable growing demand of finance as the youth pursue education and the South African government has not been able to meet the demands (Mutekwe, 2017). As a result, high education costs have increased inequality in accessing higher education in South Africa (Kamga, 2019). In 2015, the equality demand and lack of supply gave birth to one of the historical movements know as #FeesMustFall established in response to higher education increased costs and demand for free education as per Nelson Mandela's wishes (Mutekwe, 2017).

The study on post-schooling education and training in South Africa statistics indicated that a total number of 2.8 million youth 18-24 years old, in 2016, were not enrolled in any higher

education institutions (DHET, 2017). When questioned, the half of the population (1.4 million) indicated that, them not attending school was due to lack of financial affordability. Among the Black African population, more than half (53%) could not study due to lack of finances and 20% was due to poor academic performance. By contrast, White population (28%) also indicated the lack of attendance due to lack of finances and some (53%) indicated they were satisfied with their level of education whereas, only 15% of Black African shared the same view (DHET, 2017). This indicates that lack of finances remains a challenge in accessing higher education most especially in this era of education.

The challenges discussed above occurred although the department of higher education had already established the National Student Financial Aid Scheme (NSFAS) to assist with student funding (Badat, 2010). However, in contrast, according to Stats SA (2019), since the establishment of the NFSAS, students' attendance at the university has risen and between 2010 and 2017, a total number of 3 983 857 of students were granted R70.8 billion. In 2017/18 financial year, a total budget to public university expenditure amounted to R31.6 billion and has since increased by R149.7 billion similarly, during the 2011 and 2017 period, higher education cost doubled (Stats SA, 2019). More significantly, the #FeesMustFall campaign achieved a breakthrough by influencing the government to make higher education free for students who are from poor or working class background. These are students from households that earn a maximum of R350 000 per annum (DHET, 2017). Although the NSFAS initiative continues to be highly beneficial for undergraduate studies, it is limited and does not fully cover the demands of the current times where there is a need for more qualifications.

A study conducted on higher education degree and its returns indicated that the more qualifications one has, the more they are employable (Cloete, 2016). South Africa currently runs on a structure premised on the discourse of "have or have not" in enabling high returns for degrees or unemployment (Cloete, 2016). Currently, the labour market favours individuals with more than just a degree. Therefore, just a degree is not enough, especially for Black African students who majority of them are from disadvantaged backgrounds; hence they continue to face high levels of unemployment (Cloete, 2016). Furthermore, in most countries, developed or developing, only a small number of learners go to university and ultimately obtain academic success (DHET, 2017; U.S. DoE, 2016; Roman, 2014). In South Africa, the analysis of the 2006 cohort indicated that more than 70% of students on NFSAS did not successfully complete their studies on record time (Cloete, 2016). Cloete (2016) further elaborated that NFSAS keeps releasing funding without monitoring and evaluating the outcomes and by so

doing creating more dependence and risking shortage of finance. With the described low completion rate, perhaps even more important is not funding but the decolonisation of higher education curriculum to enable academic success.

2.4.4 Decolonisation of the educational system

Globally, the decolonisation of the education system has been a mandate and for many, this means different constructs; for some it means increased gender inclusivity, race diversity and for some, it means decreased gap in access to equal education between Black, White, Asian and Hispanic (United States Department of Education, 2016). In South Africa, for universities that are historically Black, decolonisation of education is viewed as receiving the same quality of education as received in historically White universities (Langa et al., 2016). For historically White universities, decolonisation of education is viewed as changing the curriculum to include Africanness (Langa et al., 2017). However, Mutekwe (2017, p. 144) explained decolonised education as a curriculum theory “an interdisciplinary study of educational experiences that seek to replace Eurocentric and American-centric views with Afrocentric ones.” This is the provision of pure education that is affiliated with Blacks resulting from the lack of affiliation with the current western curriculum (Kamga, 2019). Numerous studies, locally and globally, indicated that the decolonisation of education and readdressing of the past may bring about academic success particularly for students that originate from disadvantaged backgrounds (Orlov et al., 2018; Cross & Carpentier, 2009; Roman, 2014; Roodt, 2018; Wolhuter, 2014)

Most students indicated that although the #FeesMustFall movement was as a result of the demand for free education, it also included the demand for decolonised education (Langa et al., 2017). The students’ narratives on a study conducted in the post 2015 #FeesMustFall movement, mentioned that there was a need for “dispossession, repossession and the restoration of their lost Africanness” (Langa et al., 2017). Decolonisation incorporates physical and social changes as an attempt to reconstruct the university environment (Kamga, 2018). This includes reconstructing the language used in learning, primarily at historically Afrikaan institutions and reconstructing the institutional culture to accommodate Black Africa students (Langa et al., 2017). The western curriculum, language and culture (way of doing things and the norms and values of the institution) favours the students from advantaged backgrounds over students from disadvantaged background and creates an unfair advantage for academic success (Buttelli & Bruyns, 2017; Mbiza, 2018). Mutekwe (2017) indicated that decolonisation of education is not an easy task and it involves an intense change of curriculum, thus majority of institutions still struggle. The call for decolonised education emanates from the need for

affiliation in order to ensure adaptation and a sense of belonging as per the importance of affiliation on academic success as described by Cross and Carpentier (2009). According to Mutekwe (2017) decolonisation will give a fair chance of success for students from disadvantaged background.

2.5 Tertiary student adaptation initiatives

The completion of secondary schooling and enrolment into higher education are the two most significant times for every student and in order to ensure that this period remains valuable, higher education institutions have initiated programmes designed to assist students with adaptation and inclusion into tertiary. This is a global mandate for most universities and mainly focused on first year student adaptation and creating experiences that are free of inequality and discrimination (Friedlander , Reid, Shupak & Cribbie, 2007; U.S. DoE, 2016; University of Witwatersrand, 2018).

In the United States of America, one of the core missions in higher education is to create a diverse environment consisting of Blacks, Whites, Hispanic, Asian and others not mentioned. The United States Department of Education believe that through diverse inclusion, students will feel a sense of belonging (U.S. DoE, 2016). This inclusion does not only speak to students but includes diverse inclusion across all levels of working relations within the university, from diverse leadership to diverse faculty employees. In a research conducted on inclusivity, students indicated that it is crucial for them to see diversity reflected in the curriculum and faculty, in order to enable a sense of belonging (U.S. DoE, 2016). One other initiative that is beneficial in the United State in developing a sense of belonging includes exposure of secondary school learners to higher institution while they are still working on completing their high school, this enable better and smooth adaptation to higher education institutions (U.S. DoE, 2016).

Support services also assist students with creating a sense of belonging at the university. U.S. DoE (2016) views support as a predictor for improved academic success especially for students that are first years at university. They further indicated that support such as mentoring or coaching increases the probability of a student remaining at university as well as first year programs such as summer pride programs (U.S. DoE, 2016). To raise awareness on the importance of diversity, institutions have implemented training on culture competency at first year orientation and made it compulsory for first year students to enrol for a coursework module on diversity. Successful institutions further created financial support readily available

for students from disadvantaged background in order to close the economical gap (U.S. DoE, 2016).

The U.S. DoE (2016) also implemented an assessment to determine campus climate and to gain thorough feedback on discrimination and biasness. They believe that students are most less likely to exhibit biasness and discrimination when they are aware that the institution takes strict measures to create inclusivity. This makes room for first year students to start in a healthy environment that is non-discriminative. The United States Department of Education also wanted to identify areas of improvement. One of the assessment tools that was used to understand campus race relations and improvements needed was the Gallup survey. The results from the Gallup survey showed 84% of positive feedback. Although positive climate was assumed, Black and Hispanic students still described their relations as average and not excellent (U.S. DoE, 2016).

Additionally, the Culturally Engaging Campus Environment Project (CECE) located at Indiana University created a survey to understand campus climate. The aim of this project was to create tools that were going to be used by the first-year students to understand and progress in their new and diverse environment. This was expected to help them in maximising their potential. The CECE survey did not only focus on challenges in the university environment but also explored different environments that could be beneficial and support students from diverse backgrounds (U.S. DoE, 2016). Regardless of the mentioned implementations, education in the United States of America is still undergoing challenges of race and unequal academic success between different backgrounds, including the advantaged and disadvantaged (U.S. DoE, 2016; Roman, 2014). Students still face challenges in adapting to the university (Orlov et al., 2018)

Van Dyk, et al. (2013, p. 12) further indicated that, “regardless of social and individual differences, students need support in their acculturation process for adequate adaptation to university”. For these reasons, majority of universities in South Africa, including the University of Witwatersrand (commonly known as Wits University), have initiated programmes to support all first-year students during their transition into university. These programs are created to assist universities to manage student transition so that students can better adapt to university life (Friedlander et al., 2007). Therefore, like higher education institutions in the United States of America, South African higher education institutions also established ways to simplify student transition from secondary education to tertiary education by initiating mentorship programs and counselling in institutions.

In South Africa, student centeredness is pivotal for many institutions. It is not only based on academic facilities for students, it also addresses other factors that concern learning needs for all students such as creating a conducive and inclusive cultural environment, regardless of student background (University of the Witwatersrand, 2018). To help students achieve educational and university cultural adjustment, there are transformative programmes that were initiated. A report from Wits states that the First Year Experience Programme is one of the student-centred programmes that aim to assist first year students transition from secondary school to higher education in the first few months at the university (University of the Witwatersrand, 2018). The programme includes numerous facilities contributing to student experience, sense of belonging and tapping into the untapped potential to success as well as contributing to student retention (University of the Witwatersrand, 2018). This constitutes six main areas of focus designed to make the transition as smooth as possible (As taken from the University of the Witwatersrand Integrated report 2018):

- Orientation
- Information, Communication and Technology (ICT) Skills
- Student Development (personal leadership and self-awareness)
- Learn for Life sessions (e.g. time management, learning styles, goal setting, etc.)
- Academic Seminars (plagiarism, critical thinking, etc.)
- Civic Engagement and Advocacy (community outreach, gender equity, etc.)

In South African, majority of higher education institutions are situated in the cities. Similarly, the Wits University (situated in Johannesburg). Wits University is an extraordinary university known for its international presence, high academic standards, culturally diverse teaching and learning, support and concern for student development, and determination to achieve social justice (University of the Witwatersrand, 2018). Hence, learners from different school backgrounds are attracted to the university, they migrate from across the world to pursue their education in this profound university. However, this university was the hub for the #FeesMustFall movement. This was due to financial concerns and the need for decolonised education in an endeavour to minimise discrimination among students (Langa et al., 2017).

Due to the location of Wits, students from rural and township areas need to adapt to the environment that is unfamiliar to them (Burgess, Crocombe, Kelly & Seet, 2009). On the other end, students already residing in the city or suburbs might find it easy to adapt to the environment due to their affiliation with the society of settlement (Wits University). This is

confirmed by numerous studies suggesting that students from the city are more likely to adjust to the university easily compared to the students from rural areas. This is due to differences and similarities in ways of living (Aref, 2011; Bilal, Habis, & Fadi, 2012; Bojuwoye, 2002; Briggs & Wohlstetter, 2003).

Wits University's then vice chancellor, Professor Adam Habib, mentioned the following as the key strategic goal for 2018 and beyond to ensure smooth student transition and adaptation: "We sought to professionalise our teaching, to improve academic and psychosocial support to students who are struggling, to reimagine our libraries to create more space for studying, group work and technology, and to expand our academic offerings. The university continues to ensure transformation of our institution to represent the diversity of our country and its history" (University of the Witwatersrand, 2018, p. 23).

Despite the work done and measures implemented to transition students, in 2018, the integrated report suggested that increased number of students requested for assistance and support on the "top six personal matters such as depression, anxiety, family issues, relationship difficulties, bereavement, and academic" (University of the Witwatersrand, 2018, p. 41). In response, the Mental Wellness Strategic programme was then formulated, approved and implemented, to promote psychological and emotion wellbeing by means of creating access to professional counselling services and initiating a culture of support and belonging (University of the Witwatersrand, 2018). However, there is still so much to be done to enable students to cope in higher education institutions, hence there was a concern for free decolonised education. Wits university is discussed here primarily to provide the context of the study and to exemplify local initiatives.

2.6 Acculturation

The concept, acculturation, is mostly used to understand how migrants evolve after settling in foreign countries (Berry, 2005). Acculturation as defined by Redfield, Linton, and Herskovits (1936, p.149), years ago, is a "phenomenon which results when groups of individuals with different cultures come into constant contact, with subsequent changes in the original cultural patterns of either or both groups." The high number of students enrolling into the higher education indicates that students travel from different environments and cultures to come and study in an environment different from that of their origin.

Numerous scholars reported that student migration is common and challenges related to adaptation usually occur in relation to the migrant's receiving society (society of settlement) (Myers-Walls, Frias, Kwon, Ko, & Lu, 2011; Taylor & Yu, 2009; Van Dyk, Van de Poel, & Van der Slik, 2013). Most studies on acculturation focus on how immigrant students adapt to higher education in foreign countries and less on students who come from the same country but with different cultural and socio-economic educational backgrounds (Lee, 2005; Mena, Padilla & Maldonado, 1987; Mulla, 2014; Naidoo & Mahabeer, 2006). The current study focuses on students from the same developing country but different cultural and socio-economic educational backgrounds.

2.6.1 Berry's Model of Acculturation

In attempts to understand acculturation, it is important to determine culture distance. Berry (1997) expressed the importance of examining both the culture of origin and culture of the host, in order to understand the cultural context and cultural distance's influence on an individual's acculturation process. Berry (1980) defined cultural distance as the degree of differences between two cultures, culture of origin and host culture; these differences include beliefs, values, language and cultural practices. The acculturation strategy that an individual adapts, and the amount of acculturation stress is dependent on culture difference. Berry (2005) suggested that this model becomes a success when the following steps are considered:

1. Determining cultural distance between original and host culture by gathering group level sociocultural information from both cultures.
2. Evaluation of acculturative stressors according to literature including individual level information such as education level, age, gender and economic status.
3. Assess the influence of acculturative strategy on the different variables under investigation by the research study.

The current study investigated the culture distance between both cultures at a group and at an individual level. The study assessed the influence of acculturative strategy on student's academic performance and adaptation. The study also investigated the relationship between school background, adaptation and acculturative strategy.

2.6.2 Acculturative strategy model

Acculturation strategy is defined as the assumed adaptive behaviours and attitudes by individuals from a non-dominate culture in a dominate culture (Berry, 1990). Acculturative stress may be experienced when an individual attempts to understand the society of settlement

or dominant host culture. Acculturative stress occurs due to the recollections from the culture of origin while making attempts to adapt to the receiving society. The manner in which individuals handle acculturative stress is dependent on four acculturation strategies (Berry, 1997). Berry (2005) indicated that the four strategies are; assimilation, separation, integration and marginalization. These four strategies are built by cross-section of two factor; decisions connected to society of origin and decisions connected to embracing the receiving society as represented below in table 1.

Table 1: *Berry's Acculturation Strategy Model (by Author, 2020. Adapted from Berry, 1997)*

		Orientation to home community (Society of origin)	
		High	Low
Orientation to university community (society of settlement)	High	Integration	Assimilation
	Low	Separation	Marginalisation

To determine the acculturation strategy of an individual, Berry (1990) developed a concept of attitudinal dimension on the left of the table (Society of settlement). High association with cultural maintenance occurs when one is more incline to the left side of Berry's model, integration and separation. Individuals that are more inclined to these acculturation strategies are more likely to see their own culture as important and turn to preserve their own cultural values, language and practices. On the contrary, some individuals do not exhibit strong devotion to their own cultural practices, values and language (Berry 1997). These individuals fall on the right side of this model, assimilation and marginalisation.

Furthermore, attitudinal dimension influences the left side of the model representing the direction of acculturation strategy, which includes individuals that view cultural integration as important. These individuals fall on the upper side, integration or assimilation and they desire to participate in the values, practices and language of the society of settlement (Berry 1997). On the contrary, some individuals rejecting integration into the society of settlement fall on the bottom of the model, separation or marginalisation. In between the four acculturation orientations and the two attitudinal dimensions, the high and low indicate the association with the two variables. According to Bai (2015), these two attitudinal dimensions together inform the individual's acculturation orientation into one of the four. Each orientation has its own

specific level of acculturative stress and predictive of a certain degree of acculturative stress regardless of the culture of origin (Bai, 2015). Acculturative stress is also most likely to have an influence on student adaptation and academic performance.

Regardless of its preciseness, the acculturation strategy model receives criticism. The criticism includes the lack of empirical evidence on the relation between the two attitudinal dimensions and the four acculturation strategies. The critic suggests that there is poor alignment or relationship between the two attitudinal dimensions and four acculturation strategies (Rudmin & Ahmadzadeh, 2001). This critic questions Berry's model on its credibility and reliability. However, Berry, Phinney, Sam and Vedder (2006) responded to this critique with empirical evidence determining the relationship between the variables in the model using a large international study. The study was on immigrant youth acculturation and adaptation, with a sample of 7 997 youth aged 13-18 years and had settled in 13 societies. The study indicated that there was a considerable relationship between the attitudinal dimensions and the four acculturation categories. Integration orientated youth were more likely to have best psychological and sociocultural adaptation, whereas other orientations had overall moderate (assimilation), poorer (separation) and worse (marginalisation) adaptation. The four categories of Berry's model exhibited sociocultural behaviours and psychological responses, indicating a relationship between the attitudinal dimensions and acculturation orientation.

The assimilation strategy is defined by an individual's desire to not preserve their original cultural identity but integrate with other cultures. In contrast, the separation strategy occurs when an individual decides to uphold their original culture over others and avoids any cultural interaction. When there is a balance of interest in both cultures, the individual will most likely embrace their original culture and interaction with other cultures, this strategy is called integration. Marginalization on the other hand occurs when the individual expresses little interest in upholding either of the origin or dominant host culture (Berry et al., 2006).

Assimilation category

Assimilation strategy includes individuals that embrace the host culture identity and rejects the ethnic cultural identity of their own. This occurs if an individual decides to do away with their own cultural linguistic and characteristics, and embrace the host culture in; dress code, food, norms and ethnicity. Numerus studies have indicated that distinguished desired characteristics such as; accent, norms, socio-economical, language and school background, by the migrant's society of origin can influence one to reject their society of origin while embracing society of

settlement (Berry, 1980, 1990, 1997; Mulla, 2014; Myers-Walls et al., 2011). Although this strategy is used as a coping mechanism, it is also associated with moderate degree of acculturative stress from unlearning or subduing of one's cultural practices and adopting another (Friedlander et al., 2007; Mena et al., 1987; Ward & Rana-Deuba, 1999). The acculturative stress might also be due to rejection from the society of origin.

Separation category

Separation occurs when one adheres to their ethnic cultural identity and rejects influence of other cultural groups. This occurs if an individual affiliates with their own language, beliefs, ethnics and practices over those of the society of settlement. This type of acculturation strategy is least prominent, has negative consequences on academic performance as one volitionally isolates themselves from the society of settlement and inevitably fails to benefit from social support and every benefit offered by the society of settlement (Berry, 2010; Lee, 2016).

However, Berry (1997) indicated that less frequently, the society of settlement produces an environment characterized by prejudice, inequity and discrimination, resulting in involuntary isolation from the dominant host culture due to an unhealthy environment. It is also important to note that personal aspirations or desires are not always appropriately reflected by the society of settlement. This may lead to separation orientation (Berry et al., 2006). Separation orientation is accompanied by moderate degree of acculturative stress (Lee, 2016; Ward & Rana-Deuba, 1999). Literature view individuals in this strategy as separatists and indicate that they are least likely to acculturate successfully in school settings (Sam & Berry, 2010).

Integration category

Integration is associated with healthier acculturation experience due to less amount of acculturative stress experienced in this strategy (Bai, 2015; Berry, 2005; Ward & Rana-Deuba, 1999). This strategy is characterised by retention and acceptance of both the host and original cultural ethnical identities, language, norms and values. This leads to the maintenance of cultural integrity for both cultures (Berry, 1997). Although integration between the two cultures is maintained, the usage and expression of cultural norms or practices are highly situational and dependent on different environments (Lee, 2016). Research has found that students that are integration orientated perform better than those who are in all other three dimensions (Bai, 2015; Chataway & Berry, 1989; Friedlander et al., 2007; Ward & Rana-Deuba, 1999). Friesen (2015) also indicated that individuals that are integration orientated tend to experience fewer adaptation difficulties due to their acceptance of the new culture while upholding their own.

The individuals in this category blend both society of origin and society of settlement and manage to successfully participate in both.

Marginalization category

Marginalisation is associated with significant psychological acculturative stress, depression and anxiety, research has also considered this acculturation strategy to be the least desirable (Bai, 2015; Berry, 2005; Friedlander et al., 2007; Ward & Rana-Deuba, 1999). This acculturation strategy is characterised by abandonment and rejection of both society of origin and society of settlement's norms, practices and beliefs (Berry, 1997). It can be as a result of forced exclusion, little chance of cultural maintenance or lack of interest in developing relationships (Friesen, 2015). Furthermore, lack of interest in one's own culture could often be due to cultural identity loss, and lack of interest in integrating with other cultures (Taylor & Yu, 2009). Marginalisation orientation could also be as a result of culture shock (Laher & Pillay, 2015). Culture shock is defined by Oberg as a feeling of anxiety, confusion and uncertainty from residing in a society that is significantly different from the society of origin (Myers-Walls, 2011; Naidoo & Mahabeer, 2006).

2.7 Acculturation strategy influence on academic performance and adaptation

Does acculturation orientation have an impact on academic performance and adaptation to university?

The academic outcome obtained post-schooling is defined as academic performance or (academic) achievement and it is determined by the student and educator educational goals (Naicker, 2011). Academic achievement is commonly measured by continuous assessment, although these assessments may take numerous forms, it is mostly measured quantitatively, indicating how many modules a student is able to pass by looking at the scores they obtain (Naicker, 2011). Academic performance on the other hand is defined by how a student relates and copes with their studies in order to accomplish set educational goals (Naicker, 2011). Rivkin, Hanushek and Kain (2005) further suggested that academic performance and academic achievement can be used interchangeably although academic achievement is a component within academic performance. For the purpose of this study, the researcher focuses on academic performance as a whole and how it is influenced by both acculturation strategies and school background.

According to Baker and Siryk (1989; 1999) adaptation (used interchangeably with adjustment) is defined as changes that occur when a migrant is in a host culture, these include behavioural, attitudinal, cognitive and psychological changes. Numerous studies conceptualised adaptation to university in terms of four dimensions: personal-emotional adjustment, social adjustment, academic adjustment and attachment (Baker & Siryk, 1999; Berry, 1997; Bilal, Habis & Fadi, 2012; Burgess et al., 2009; Mulla, 2006). These four dimensions were developed by Baker and Siryk (1999) as the “Student Adaptation to College Questionnaire (SACQ)”. SACQ is used to measure the four dimensions of student adaptation to university.

Bilal et al. (2012, p. 9) described academic adjustment as “The ability of a student to obtain university life adjustment and a state of satisfaction with their overall performance including that of colleagues and teachers and their collective educational demands.” Personal (emotional) adjustment is referred to as a cognitive process of acceptance, which entails maintaining emotional stability in the midst of internal and external circumstantial stressors in the host culture (Baker & Siryk, 1999; Habibah et al., 2010). Bilal et al. (2012) further described social adjustment as the psychological process in which the student is determined to make effort in order to cope with the host cultural values, norms, standards and needs in exchange of acceptance. Lastly, according to Rodríguez, Tinajero, Guisande, María and Paramo (2012), attachment refers to the student’s commitment to goals that have been institutionalised and the relationship that exists between the student and the institution.

Numerous scholars indicated that acculturation categories inform students’ attitudes as well as their academic behaviour and performance (Chataway & Berry, 1989; Petersen, Louw & Dumont, 2009; Smit, 2012; Van Dyk, 2013; Ward & Raba-Deuba, 1999). A study conducted by Petersen et al. (2009) on adjustment to university and academic performance among disadvantaged students in South Africa found that students that are integration orientated perform significantly better than most students in other acculturation categories. These students perform significantly better due to the characteristics embedded in the integration orientation including low levels of socioemotional and acculturative stress, improved self-regulation, self-concept, acceptance, positive academic behaviour and attitude, and intercultural engagement (Berry, 2005; Berry & Chataway, 1989; Naidoo & Mahabeer, 2006; Sommer & Dumont, 2011). According to Bilal et al. (2012), this acculturation orientation is associated with high probability of positive academic adjustment, social adjustment, personal (emotional) adjustment and overall attachment with the university. This is due to the effort the student

makes to be part of the host culture while maintaining their culture of origin (Burgess et al., 2009; Naidoo & Mahabeer, 2006).

Assimilation strategy is associated with moderate socio-emotional and acculturative stress which results in moderate academic performance (Ali et al., 2013; Habibah et al., 2010). Students perform better due to less conflict in cultures as a result of understanding and adapting to the society of settlement (Ali et al., 2013). However, students in this strategy might experience conflict when they visit their society of origin and might find it challenging to engage in this environment (Laher & Pillay, 2014). Furthermore, Bai (2015) indicated that, it is also challenging to unlearn practices of the society of origin culture in order to learn new practices in the society of settlement. Therefore, this process might delay the students' academic performance progress, although it may not be the main cause for significant academic performance drop (Bai, 2015; Burgess et al., 2009). A study conducted by Mulla (2014) on adaptation of first year students at Milieu University indicated that this acculturation orientation is associated with positive social adjustment and academic adjustment. However, this positive association was questionable due to internal conflicts associated with the abandonment of the students' own culture and the immense effort to unlearn or replace practices in order to learn practices of the host culture (Mulla, 2014).

On the contrary, separation strategy is characterised by increased socio-emotional and acculturative stress. This orientation has unfavourable consequences that include poor academic performance resulting from isolation from the dominant host culture and its facilities that may enable adaptation (Ali et al., 2013; Berry, 2005; Chataway & Berry, 1989; Clinciu, 2013; Honig & Rainey, 2012; Lewin, 2007). Berry (1997) indicated that students deem themselves as being discriminated from the dominant host culture and this makes it challenging to integrate. As a result, this might have an impact on academic performance due to the disinterest and lack of engagement with the cultural norms and educational social events in the society of settlement (Habibah et al., 2010; Mudhovozi, 2012). This acculturation orientation is associated with negative academic adjustment, social adjustment, personal (emotional) adjustment and overall attachment to the university (Mudhovozi, 2012; Nel et al., 2009).

Lastly, marginalisation orientation is also characterised by increased socio-emotional and acculturative stress which has an impact on academic performance (Clinciu, 2013). Laher and Pillay (2014) further indicated that students that are marginalisation orientated find it challenging to cope due to the isolation from both cultures. Therefore, they fail to interact with

other students for social support. This inevitably impacts students' academic performance. This is further supported by Berry and Chataway (1989) who urged that this orientation can negatively predict student's academic performance because of the negative attitudes and behaviours elicited. Furthermore, few scholars indicated that this strategy is associated with increased anxiety, a feeling of incompetence, confusion and helplessness (Berry, 2005; Laher & Pillay, 2014; Mulla, 2014; Myers et al., 2011). In some cases, students might feel that both the culture of origin and dominant host culture do not fit into their personal aspiration and desires. As a result, they inevitably reject both cultures (Berry, 2005). In other instances, students might feel that they are now too "well-off" for the culture of origin and too rural for the society of settlement. As a result, they inevitably disassociate with both cultures. This acculturation strategy is also associated with undesirable academic adjustment, social adjustment, personal (emotional) adjustment and overall attachment to the university (Mena et al., 1987; Nel et al., 2009). This could be due to the disassociation from both cultures and lack of sense of belonging.

2.8 School background and acculturation strategy

Is there a relationship between school quintile and acculturation orientation?

Numerous studies, globally and locally, have proven that student's school background influences how they acculturate, the level of acculturative stress they experience and inevitably influence adaptation and academic performance (Bai, 2015; Burgers et al., 2009; Clinciu, 2013; Petersen et al., 2009). Student's school background has also been found to influence Academic performance and adaptation (Petersen et al., 2009). Literature has also shown that educational background influences students' acculturation orientation as they attempt to cope with acculturative stress (Bai, 2015; Huang, 2015; Lee, 2016).

Students that are assimilation orientated embrace the society of settlement and reject the society of origin (Friesen, 2015). This orientation is prominent in students as one of the motivations to enrol at a university is the desire to take part in the most sought after culture provided by universities (Friesen, 2015). Students from both, low and high quintile school backgrounds are equally most likely to be assimilation orientated due to different motives; influenced by the different socio-economic factors from the society of origin (Berry, 1980; Malhoit, 2005; Smit, 2012). Students from disadvantaged school background might feel the need to be affiliated with another culture over their own in order to be relevant although it might be challenging due to culture distance (Petersen et al., 2009). Students from advantaged school background are

more likely to assimilate into the university culture due to the cultural similarities found between both quintile schools and university (Boughey, 2007; Marshall & Case, 2010).

Students that are separation orientated are also from both high and low quintile school backgrounds. According to Ali et al. (2013), this type of orientation is highly depended on individual's values and aspirations; if the culture of the society of settlement is not desirable, students will inevitably remain rooted in their culture of origin. However, Berry (2010) indicated that this decision is involuntary; it is used as a coping mechanism to not be associated with an environment that is unhealthy, exhibit abuse, discrimination and prejudice. Research indicate that students from low quintile school background suffer rejection and lack of affiliation with the host culture caused by their interaction with students from advantaged background and systems that do not allow for an average person life experiences (Kamga, 2019; Langa et al., 2017; Taylor & Yu, 2009; Van der Berg, 2007). The acculturative stress associated with this orientation is the internal conflict that constantly exists due to exhibiting a foreign culture in the current society of settlement.

Integration orientation is the most prominent, and most appropriate. It is the preferred orientation for academic performance and adaptation (Bai, 2015; Berry, 2005; Friesen, 2015; Laher & Pillay, 2015; Kuo, 2014; Ward & Rana-Deuba, 1999). Students from high quintile schools are most likely to simultaneously maintain their culture of origin and embrace the culture of the settlement society (Burgess, 2009; Mudhovozi, 2012; Van Dyk et al., 2013). Migration usually concerns moving to cities or places that are fairly developed, therefore, individuals from advantaged background are likely to experience less acculturative stress and find it easy to adapt (Bilal et al., 2012; Berry et al., 2006). Cloete (2009) further indicated that there is a high probability of less cultural difference between the society of origin and the society of settlement for students from advantaged school background. Students from high quintile schools are mostly familiar with diversity in the classroom and fairly familiar with the systems utilised in higher education, they are also exposed to self-management; all of these contribute to their decreased acculturative stress (Barber & Mourshed, 2007; Briggs & Wohlstetter, 2003; Howie, 2011; Schleicher, 2009). They are mostly integration orientated whereas students from low quintile schools might experience culture shock and be inevitably marginalised.

Marginalisation orientation is the least desirable. Due to students' low sense of belonging, it is characterised by significant psychological acculturative stress and low academic performance

(Bai, 2015). Taylor and Yu (2009) indicated that this type of orientation is mostly due to culture shock and a possible cultural identity loss. Students from low quintile school background are more likely to be marginalisation orientated (Laher & Pillay, 2015). Research found possible explanations to be avoidance of integration and its challenges caused by unfamiliarity of the university culture (Bai, 2015; Berry et al., 2006). Another explanation provided was the internal conflict due to the need to choose between an unfamiliar culture over the culture of origin (Bai, 2015; Berry et al., 2006). As well as feeling a sense of not belonging to the original culture due to settling at the host dominant culture (Bai, 2015). The probability of students from high quintile school background falling under this strategy is low as majority of them are relatively exposed to the university culture and face comparatively different challenges from those faced by their counterparts (Mbiza, 2018; Mena et al., 1987; Naidoo & Mahabeer, 2006). However, as students from low quintile school background progress and develop certain attitudes and tolerance, they might reach a point of employing an acculturative orientation that encourages interplay between cultures (Mena, et al., 1987; Taylor & Yu, 2009).

2.9 School background, academic performance and adaptation to university

2.9.1 School background influence on academic performance

Does school quintile have an impact on academic performance?

The excessive lack of finances and resources currently existing in South African schools contribute to the challenges faced by students when acculturating. This affects their academic performance at the university level. Fleisch (2008) stated that secondary preparation for university is directly associated with academic performance in higher education. Further evidence states that South African secondary education fails to adequately prepare students for university, thus the academic success gap that exists between secondary and higher education creating delay in student degree completion (Boughey, 2007; Ebersöhn & Ferreira, 2012; Foy, Martin & Mullis, 2010; Nel et al., 2009; Gardiner, 2008; Howie, 2011; Jansen & Taylor, 2003; Katsikas & Panagiotidis, 2010; Schleicher, 2009). According to Mbiza (2018), a study focusing on students who commenced their third-year degree in 2011 indicated that only 29% of students graduated within their three-year allocated period, with majority being from high quintile schools and 42% withdrew their studies, with majority of students being from low quintile schools. According to Ebersöhn and Ferreira (2012), inadequate secondary educational resources inevitably result in limited intellectual rigors of university life.

The poor standard of primary and secondary education is partly due to a higher proportion of money allocated to higher education than to basic education (Howie, 2011). A first year student will inevitably have challenges acculturating psychosocially and academically because of an economically poor secondary school background. A study conducted by Spaull (2013) confirmed that out of the 70%, only five percent of the poorest South Africans with poor secondary education standard enrol at a university. This is a concern that South Africa is focusing on higher education and neglecting basic education. According to Dr Spaull and other scholars, expenditure on higher education than basic education is a highly short-sighted trajectory and continues to prevail (Cloete, 2016; Roodt, 2018; Spaull, 2011).

The Trends in International Mathematics and Science Study (TIMSS) mathematics score results on maths, reading and literacy, conducted in 2016, indicated that there is a vast difference in the performance of South African students depending on the province of residence and the type of school (fee pay or non-fee paying; advantaged or disadvantaged school) (Roodt, 2018). The results indicated that the three best performing provinces were Free State, Gauteng and Western Cape. Eastern Cape, North West and Limpopo were the poorest performing provinces in 2016. Unsurprisingly, the richest provinces (GDP per capita and per capita) were the best performing, compared to the poorest performing provinces (Roodt, 2018). This was an indication that disadvantaged provinces might be lacking enough school resources due to their socioeconomic status, thus impacting their school performance (Mbiza, 2018).

Students from advantaged schools or high quintile schools perform nearly 40% better than those from disadvantaged schools or low quintile schools (Mbiza, 2018; Gardiner, 2008; Van der Berg, 2007). Students from disadvantaged backgrounds; poor school infrastructure and parents that do not have some level of primary school knowledge, are at a disadvantage, academically (Aref, 2011; Gardiner, 2008; Howie, 2011). This indicates that the socio-economic context has an impact on academic performance. Students were also found to perform better if they were not experiencing violence or discrimination and were familiar with the language used for the tests (Van der Berg, 2007). Furthermore, Mudhovozi (2012) states that students that have the capability and facilities to assist them with adaptation to university perform better compared to their counterparts.

According to Stephen, Welman and Jordan (2004) Mathematics and English performance in secondary school can be a possible predictor of university performance. Schools in quintile one perform poorer in mathematics, while 80% passes are in quintile five (Roodt, 2018). In 2016,

a study by Dr Spaull was conducted on mathematics performance among five quintile schools. The results indicated that only 1.5% of students in quintile three schools scored 80% mark for mathematics and 3% in quintile four schools managed 80% mark, while 9.7% in quintile five schools managed to also obtain the mark of 80% (Roodt, 2018). However, there were students that achieved 40% from the three quintiles with high scores (Roodt, 2018). The study further indicated that out of 265 000 students that wrote mathematics in 2016, only 8000 scored more than 80% and 53% being from quintile five schools and with quintile one schools only 6.5% students managed to obtain a more that 80% score (Roodt, 2018). However, Langa et al., (2017) argued that regardless of the school background, students that enrol for university can achieve good academic performance in the presence of appropriate support and determination.

2.9.2 School background influence on Adaptation to university

Does school quintile have an impact on adaptation to university?

Various studies reported that first year university students do not have adequate capabilities to enable them to integrate into the academic culture and this is primarily due to their school backgrounds (Aref, 2011; Burgess et al., 2009; Cliniciu, 2013; DBE, 2011; Mulla, 2014; Shepherd, 2011; Van Der Berg, 2007; Van Dyk et al., 2013). Furthermore, according to Sennett et al. (2003), fundamental challenges of transitioning are primarily due to the historically westernised institutions that provide a limitation to an average South African student. This contributes to the students' adaptation challenges. Hence, there was a rise in the call for decolonised education through the #FeesMustFall movement. Students felt the need for universities to include Africanness in their environments to ease students' adaptation (Langa et al., 2017). University standards are different from those of secondary school. They consist of a diverse environment both academically and socially. Students become uneasy as they feel the need to adapt the university's ways of living which speaks to attachment academically socially and emotionally (Baker & Siryk 1999; Mudhovozi, 2012; Mulla, 2014).

The university environment is a new setting for first year students; it influences them differently and stimulates different behavioural or psychological responses (Laher & Pillay, 2014). Hence, life at university for first year students can be exciting, lively but also challenging and unpleasant (Habibah, et al., 2010). Moreover, university provides the opportunity to become independent. Students' dependency on parental control decreases, they also get freedom that they did not experience in secondary school (Burgess et al., 2009). In addition, students must build new relations in an unfamiliar environment. In most times this

results in mental and physical distress (Burgess, et al., 2009). This subsequently informs the acculturation strategy as well as influence students' adaptation and academic performance.

According to Mudhovozi (2012), adapting can be a determining factor on students' success at university. Although, majority of first year students find adaptation challenging on all four dimensions (Cliniciu, 2013). Good academic adjustment is associated with students that believe in their capabilities, who are motivated to implement their abilities, and are satisfied with their university selection (Bilal et al., 2012). A study conducted by the Council on Higher Education [CHE] (2016) on higher education in South Africa found that students from disadvantaged school backgrounds were lacking the required language, social skills and conceptual background to enable them to effectively achieve academic adjustment.

CHE is further supported by a study conducted by Sennett et al. (2003) on adjustment of Black African students at a historically white South African university. Majority of Black African students originate from quintile one to three disadvantaged school backgrounds due to the apartheid legacy. The study reported that students' social capacity and conceptualisation of knowledge was limited for Black African students due to their school background (Sennett et al., 2003). Numerous scholars are in support of the view that school background has an impact on academic adjustment and inevitably influencing academic performance (Barber & Mourshed, 2007; Gardiner, 2008; Hugo et al., 2010; Jansen & Taylor, 2003; Lewin, 2007; Petersen et al., 2009; Scott et al., 2007; Sherperd, 2011; Smit, 2012; Spaul, 2011,2013).

Contrary to the above mentioned findings, a study by Bojuwoye (2002) investigated the adaptation of students from disadvantaged schools in South Africa and found no significant differences in academic adjustment. Furthermore, findings suggested that adaptation does not guarantee academic performance, neither does school background guarantee adaptation (Bojuwoye, 2002). Instead, they claimed psychological factors provide a better explanation for student adaptation, exclusive of the school background (Bojuwoye, 2002). Nonetheless, psychological, emotional or personal factors may be influenced by the students' school backgrounds and might explain the encounters experienced throughout the transitioning process.

Personal (emotional) adaptation is a challenging process that is inclusive of psychological anxiety and physical adjustment of students to their society of settlement (Baker & Syrik, 1999). Physical health has a pivotal role as it directly links to one's psychological or mental health (Cliniciu, 2013). The majority of students from advantaged school backgrounds might

be able to finance physical activities at the university. However, some of the students from disadvantaged school backgrounds might find it challenging or encounter lack of motivation due to the lack of previous experience with physical activities (Petersen et al., 2009; Smit, 2012). Numerous studies reported that a vast number of students from previously disadvantaged school backgrounds experience significantly higher acculturative stress with anxiety and depression compared to their counterparts from advantaged school backgrounds. This influences students from previously disadvantaged school backgrounds' emotional or personal environment adjustment negatively (Boughey, 2007; Habibah et al., 2010; Nel et al., 2009; Smit, 2012; Taylor & Yu, 2009).

Social adjustment involves the ability to cope with societal requirements and interpersonal standards of the society of settlement including taking part in extra-curricular programs and societal clubs, group work and inevitably forming relations (Baker & Siryk, 1999; Ward & Rana-Deuba, 1999). According to Mudhovozi (2012), social adjustment can be impacted by the university's social initiatives such as residence communities and social communal networks invented by the university to ease the social adjustment process. Several studies indicated that having relations with other students and involvement in informal connections has a positive impact on social adjustment (Bilal et al., 2012; Mudhovozi, 2012; Mulla, 2014; Nel et al., 2009). Bilal et al. (2012) and Petersen et al. (2009) further mentioned that majority of disadvantaged school background students do not reside in the school residence and this can result in lack of involvement in the extra-curricular activities. Furthermore, the unfamiliarity of language used at the university might have an impact student development of friendships (Mulla, 2014). According to Rodriguez et al. (2012), educational psychology discipline states that students that are incapable of developing social and interpersonal relations might be at risk of not completing their schooling, because learning outcomes are highly influenced by social relations and support.

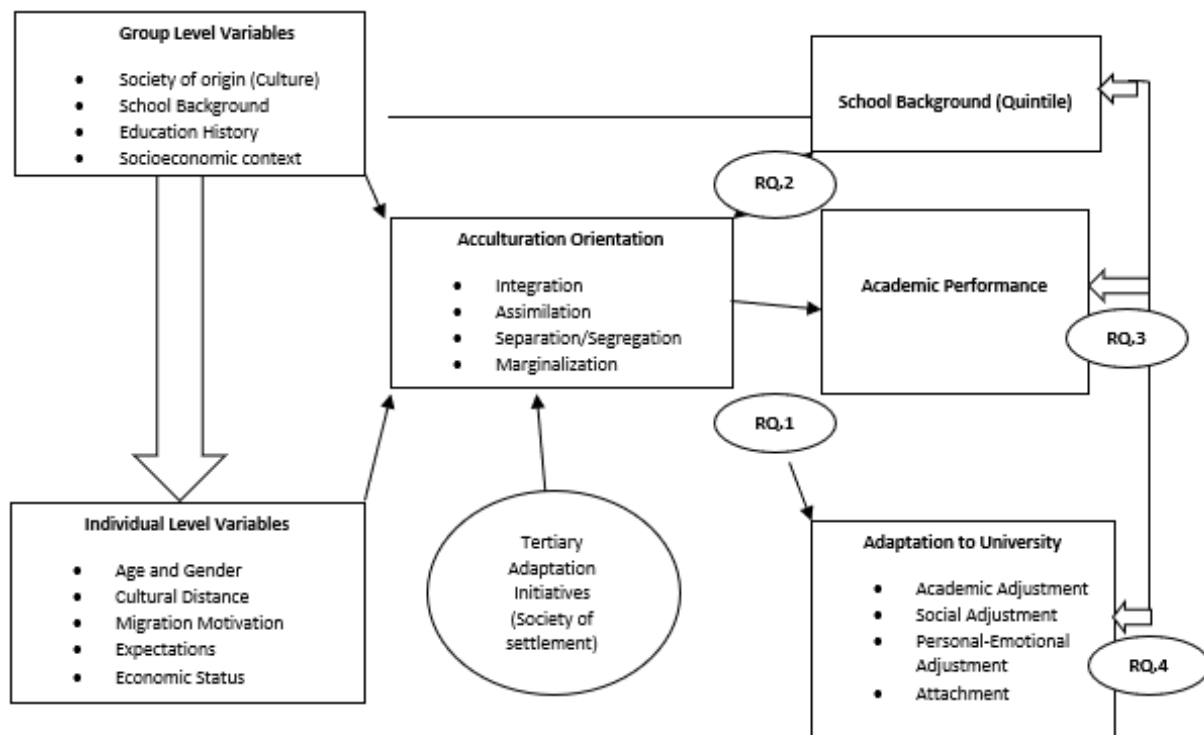
Similarly, attachment to the institution can be positively impacted by residing in the same residence as other students, being part of student programs such as student unions, sports clubs and study groups (Mulla, 2014; Ward & Rana-Deuba, 1999). Although some of the students from disadvantaged school backgrounds can afford accommodation at the university through the use of scholarships, some of them can only qualify for student loans that might not be sufficient for accommodation in an historically White university (Langa et al., 2017; Petersen et al., 2009; Taylor & Yu, 2009; Van Der Berg, 2007). A study conducted by Sommer and Dumont (2011) on psychological factors predicting academic adjustment of students indicated

that students from disadvantaged school background attachment process is prolonged due to different norms and ways of living in the society of settlement compared to their counterparts. Adhering to the society of settlement ways of living can result in effective student attachment to the university and integration orientation experience which will inevitably have a positive impact to the student academic performance.

2.10 Conceptual Framework

The review of the extend literature led to the development of the below (figure 1) conceptual framework with the aim of answering the research questions and ultimately understand students' academic performance. Research questions are depicted as "RQ" 1, 2, 3 and 4 in the below conceptual framework (figure 1). In addition to the research questions, group level variables, individual variables and tertiary adaptation initiatives (society of settlement) variables were included as they form an integral part of the conceptual framework, according to the reviewed literature. Figure 1 illustrates the conceptual framework employed in the current study.

Figure 1: Conceptual Framework (by Author, 2020)



An International Association of Applied Psychology article issued by Berry in 1997 was cited over 5000 times providing a conceptual framework for bilateral acculturation indicating the individual and group level variables that influence the acculturation process (Ward & Rana-Deuba, 1999). Berry et al. (2006) further stated that acculturation occurs on two different levels namely; group and individual level. The group level variables include characteristics from one's society of origin (socioeconomic context, school background, education history) and society of settlement (multicultural ideology) (Berry, 1997). These group level variables interact with the individual level that the individual carries to the new culture or society, these includes education, gender, age, pre-acculturation and economic status (Berry, 1997). These factors influence an individual's acculturation experience which can either result in long term outcome of adaptation with the appropriate support, such as tertiary adaptation initiatives or result in unhealthy adaptation (Berry, 1997; Berry, 1990; Berry, 1980; Laher & Pillay, 2014; Roodt, 2018; Lee, 2005).

According to Ward and Rana-Dueba (1999) adaptation initiatives influence the rate at which acculturation occurs, the direction acculturation takes and the magnitude in which acculturation

occurs, hence tertiary programmes for first year students are of most importance. Friedlander et. al. (2007) also attested that mentorship and counselling programmes established by universities aimed at students' transition from secondary education to tertiary education play a pivotal role in assisting students to better adapt to university life, the society of settlement. This flow of inputs and outputs in figure 1 will also be influenced by the school background as per the extant literature provided in this study.

Research question 1 (RQ. 1) was; to understand whether acculturation orientation have an impact on academic performance and adaptation to university. As discussed in detail in the current research literature, the way students acculturate have a direct impact on academic performance and adaptation to the society of settlement. Research question 2 (RQ. 2) was to establish whether there is a relationship between school quintile and acculturation orientation. As depicted in the conceptual framework (RQ. 2) there is a relationship between school quintile and acculturation orientation, this is supported by the literature discussed above.

Research question 3 (RQ. 3) intended to determine whether school quintile have an impact on academic performance. As discussed, students from high quintile school background are more likely to perform better than students from low quintile school background. Lastly, the fourth research question (RQ. 4) attempted to establish the impact of school quintile on adaptation to university. The four elements of adaption to university were presented on the conceptual framework and discussed in detail in literature, students that are from disadvantaged school backgrounds' attachment process is prolonged due to the different norms and ways of living in their society of settlement as compared to their counterparts. This delays their adaptation in all other aspects (Sommer & Dumont, 2011).

2.11 Chapter summary

The literature above makes it clear that there is a relationship between school background and acculturation strategy for students. This relationship influences academic performance and student adaptation to university. Students from advantaged school backgrounds, classified as students from quintile four and five schools are more inclined to integration orientation which is associated with academic success and better adaptation to university. Students from disadvantaged schools, classified as students from quintile one, two and three schools are more inclined to marginalisation orientation which is associated with academic failure and prolonged if not low adaptation to university. This chapter gave clarity on the educational history of South Africa and its ramifications. The chapter also gave clarity to the different school classifications

according to South Africa's education system. The tertiary initiatives to assist first year students were also discussed. The chapter ended with a conceptual framework and its link to the current study. The following chapter will discuss the methodology of the study.

CHAPTER 3: METHODOLOGY

3.1 Chapter introduction

This chapter discusses the methods used for this study. It provides; the research design, procedural techniques employed to obtain the sample, a strategy for data collection and method of data analysis. The chapter concludes with a description of the research instruments, followed by statistical analyses conducted and ethical considerations.

3.2 Research design

This is a quantitative study and it adopted cross-sectional non-experimental research design. Quantitative research design offers a type of research that explains phenomena using numerical data for the purpose of analysing and generating results (Creswell, 1994). Cross-sectional research design determines the rate at which specific events occur at a point in time (Burns & Burns, 2008). This study was undertaken over a short period and the respondents were tested once. Furthermore, the current study was non-experimental as it did not involve a control group, manipulation of independent variables or randomisation. A questionnaire was used as a data collection tool. It was posted as an online survey that respondents were asked to complete. This justifies the claim of the study being cross-sectional, non-experimental design.

The type of research design chosen allowed for an effective yet tranquil execution of this study, considering the limited amount of time and resources that were available. This approach was suited for the research purpose, which was aimed at understanding the influence of school background on academic performance and adaptation to university; by examining the different accounts of acculturation orientations particularly among Black African students.

3.3 Sample and sampling

The sample used in this study consisted of full time first-year students at the University of the Witwatersrand. The sample was chosen due to the likelihood of the current population being in the transitioning stage. The reasons for using students at the University of the Witwatersrand were due to cost effectiveness and easy accessibility since the researcher is affiliated with the institution. The study managed to obtain a reasonable sample size ($N = 304$) of first year students from various faculties. However, most students were from the department of psychology. Nulty (2008) explained that one of the ways to achieve high response rate is to use rewards as a form of incentive. For the purpose of this study, 1% mark was awarded as an

incentive to first-year psychology students for participation in the survey. As a result, there was a high participation rate from the psychology department.

The sampling method used in this study was non-probability, convenience sampling. According to Saunders, Lewis and Thornhill (2016) convenience sampling is a practical criterion to selecting participants of the study based on availability, geographical proximity and accessibility. For the purpose of this study, participation was dependent on the students' willingness and availability. Utilisation of this sampling method enabled the researcher to obtain a suitably sized sample for analysis. The socio-demographic characteristics were analysed through frequency analysis. The results indicated that 20.8% of the first-year students were male and 77.5% were female. This is understandable since majority of the participants were from the psychology department which is female dominant. Furthermore, 0.7% of the students identified themselves under the, 'other' category which did not specify. Some students (1.0%) opted not to disclose their age.

Majority (51.8%) of students were Black Africans, followed by; 25.1% White, 15.6% Indian and 4.2% Coloured. 2.3% of students were in the 'other' category and did not specify, whereas 1% refused to disclose their race. Students' ages ranged between 17 and 46 years with a mean of $M = 19.96$ and a standard deviation of $\sigma = 3.47$. Majority of the students (62.2%) were 17-19 years old. Furthermore, 34.2% of students were 20-29 years old, 1.3% were 30-37 years old, another 1.3% were 40 years and older and 1% did not indicate their age.

With regards to language, 49.5% of students reported English as their home language and 45.9% students reported African language as their home language. In addition, 0.3% students reported Afrikaans to be their home language. The different African languages in South Africa were summed up to a single construct, "African Language". However, 3.3% reported other languages, indicating that their home languages were not given as an option. Only 1% of students did not disclose their home language.

Lastly, the school quintiles were divided into two; low (Quintile one) and high quintile (Quintile two). These categories were developed using the South African school level distribution. Low quintile consisted of schools from quintile one, two and three. High quintile consisted of schools from quintile four and five. Majority of students (203) reported to have completed their secondary schooling in high quintile schools, making it 66.1% of the sample, while 47 students (15.3%) reported to have completed their secondary schooling in low quintile schools. The missing cases amounted to 18.6%.

3.4 Measurement instruments

The research data was gathered using three different questionnaires namely, Demographic Questions, Acculturation Strategies Questionnaire adapted scale by Naidoo and Mahabeer (2006), and Adaptation to University Measure Questionnaire adapted scale by Baker and Siryk (1999).

3.4.1 Demographic Questions (See appendix D).

This questionnaire captures socio-demographic information regarding the sample. The demographic characteristics under investigation included but not limited to age, gender, education, national identity, ethnic identity, language proficiency and academic performance. It also captured information relating to school background, which determined the school quintile. The item “At which school/college did you complete your NSC or other matriculation?” was used to manually locate the school quintile. These questions served the purpose of primarily informing the researcher of the student school background as well as providing measure for academic performance. Demographic characteristics were essential for descriptive purposes of the sample.

3.4.2 The adapted Acculturation Strategies scale (See appendix C).

This questionnaire included 2x4 item scales to measure Berry’s four dimensions of acculturation. This scale measured acculturation strategy categories by inquiring about students’ connection to home community and the other about connection to the University of the Witwatersrand community. A medium split cross-section was then conducted in order to produce the four acculturation categories. This scale was adapted from Berry’s four dimensions of acculturation and consisted of 8 items with 5 variables under investigation namely; clothes, language, music, food and values. Furthermore, this scale was a seven-point Likert-type scale ranging from 1-Strongly Agree to 7- Strongly Disagree. The four acculturation categories included assimilation, separation, marginalisation and integration.

Assimilation indicates students’ preference of the university culture over their culture of origin, while separation indicates preference of their own culture over the university culture. On the other hand, marginalisation indicates less interest in both cultures and low probability of upholding either of the cultures. Lastly, integration is when there is a balanced interest in both cultures, associated with exhibited interest for cultures.

3.4.3 The modified Adaptation to University Measure Questionnaire (See appendix E).

The Student Adaptation to College Questionnaire (SACQ) is a self-report instrument with the intention to measure students' adjustment to the university. Baker and Siryk (1999) developed this questionnaire in order to measure the degree to which students adapt to the university culture. It consists of items measuring four dimensions on a 9-point scale ranging from 1, 'applies to me' to 9, 'does not apply to me at all'. The four dimensions include; Academic Adjustment with 24 items measuring motive and academic performance. One example of the items includes "I am finding academic work at university difficult". Social Adjustment with 20 items measuring involvement and relationships, one example of the items includes "I feel I have enough social skills to get along well in the university setting". Personal-Emotional Adjustment with 15 items measuring wellbeing, one example of the items includes "Lately I have been feeling blue and moody a lot". Lastly, Attachment with 15 items measuring satisfaction and feelings about university, one example of the items includes "I am quite satisfied with my academic situation at university" (Baker & Siryk, 1999). This scale measure was previously used in several studies and all four dimensions had decent Cronbach alpha values (Laher, & Pillay, 2015; Mulla, 2014; Sennett, et al., 2003, Van Dyk, et al., 2013).

3.5 Validity and reliability

The quality of quantitative research is measured by its validity and reliability (Saunders et al., 2016). Gaiser and Schreiner (2009) defined validity as a way of ensuring the appropriateness of the measurement instrument used in order to establish accurate results and findings. In this research study, the instruments were reviewed and adapted to ensure suitability. This was done by incorporating views of a statistician professor who added items and removed some to ensure the appropriateness of the instruments. Salkind (2006) attested that views of an expert can be used to confirm the validity of an instrument. Therefore, this process was used to ensure face validity, which speaks to the connection between research questions and the research aim at a face value.

Reliability on the other hand is when the instrument is producing same results when repeated more than once. This ensures consistency of the results leading to credibility of the study (Burns & Burns, 2008; De vos, Strydom, Fouche, & Delport, 2011). According to Leedy and Ormond (2005), Cronbach Alpha correlation coefficients can be used to assess the reliability of the research instrument. Sekaran (2006) indicated a positive correlation of items in a set can be determined by Cronbach Alpha correlation coefficient. According to Person and Lumpkin

(2011), a score above 0.7 threshold is recommended for Cronbach's Alpha coefficient. Results presented in chapter four are in support of the reliability of measurement instruments used in this study.

3.6 Data collection and procedure

Permission from the University of the Witwatersrand Human Research Ethics Committee was obtained. This implied ethical clearance to continue with the study. Permission from the deputy Registrar was also obtained (see appendix A) and an email containing the details of the study and the survey link was sent to all first-year students at the University of Witwatersrand. Various faculty course co-ordinators also uploaded the survey link with the questionnaires onto SAKAI (the Student Portal). Students were also informed that they can take part in the study by following the link provided and complete the three questionnaires through Survey Monkey; firstly, the Acculturation Strategies Questionnaire, followed by the Demographic Questions and lastly, the Adaptation to University Measure Questionnaire. All these scales were presented as an online questionnaire using Survey Monkey.

The researcher further elaborated that the survey can be completed at any time and the duration was approximately 15 minutes. According to Howell (2008), collected raw data must be arranged cleaned and coded to enable analysis. For the purpose of this study, after the submission of questionnaires, the raw results were arranged on an Excel spread sheet, cleaned and coded to enable data analysis.

3.7 Data analysis

Data obtained from the questionnaire was downloaded into an Excel spread sheet, the Excel spread sheet was then imported onto the ©IBM Statistical Package for Social Sciences (SPSS Statistics 25). Prior to the main analysis, the data was cleaned. Cronbach's alpha analysis of reliability was conducted on each scale to determine the internal consistency and reliability of the questionnaires. Descriptive statistics for the demographic questions, such as age, gender, race, home language and school quintile were investigated, and each main analysis requirement was assumed or analysed.

To answer the first research question, one-way MANOVA and one-way ANOVAs were conducted to compare means between acculturation category and academic performance as well as adaptation to university. The aim was also to understand the impact of acculturation category on the two variables, academic performance and adaptation to university. In order to

understand the relationship between school background and acculturation category, cross-tabulation analysis was conducted. Lastly, to answer research questions; three and four, independent t-tests were conducted to investigate if school background has an impact on academic performance, and adaptation to university.

3.8 Ethical considerations

Ethical behaviour is generally considered as a set of moral principles, rules or standards governing a person or a profession (Elo & Kyngäs, 2008). It is understood that to be ethical is to do good and avoid wrong (Elo & Kyngäs, 2008). Prior to the commencement of the study, ethical clearance and permission to conduct the current research study was attained from the University of the Witwatersrand Human Research Ethics Committee (MORG/17/009 IH). Data collection was conducted few months after ethical clearance was granted. Permission from the deputy Registrar was granted and all first-year students were sent emails indicating voluntarily participate in the research study. The email included a cover letter providing a brief description of the study and the Survey link (see appendix B). On the online Survey link, a consent page explaining participation in the study, with a yes or no option, equivalent to a consent form, was provided. By selecting yes and proceeding with the questionnaires meant that one was giving their consent.

Students were also made fully aware that they could withdraw from the study should they feel uncomfortable at any stage of the survey. Due to the 1% mark credit given to the psychology students for participation, they were led to a different platform requiring for their student identification. This identification was not used for any other purpose but to correctly credit students as well as matching them to their mark. Once matching had occurred, no identifying information was kept in the final data set. The initial data set was deleted to ensure confidentiality was guaranteed.

As previously mentioned, the students were made aware that they could withdraw from the study at any given time if they felt uncomfortable with the questions or uncertain of their participation. In the case where respondents required professional support or request feedback regarding the study; the researcher and Career and Counselling Development Unit (CCDU on campus) contact details were provided on the student letter (see appendix B). Although there were no foreseeable risks in participation, the CCDU contact details were to ensure that the psychological well-being of the participants remained a priority (American Psychological Association, 2002). All data collected was kept strictly confidential, only the researcher and

supervisor had access to the data. Nonetheless, anonymity of the students was maintained by not reporting personal details of the students on the results. After the completion of the study, the collected data was protected electronically with a password.

3.9 Chapter summary

This chapter discussed the way in which this study was conducted. The research design and methodology were discussed. Additionally, the sampling strategy, measurement utilised, and the procedure implemented on the study were discussed. Lastly, statistical analyses and ethical consideration were explained. The following chapter will present results of the study.

CHAPTER 4: RESULTS

4.1 Chapter introduction

This chapter consists of data analysis for the current study. Once the data was obtained from the questionnaire survey, responses of the students were captured on the statistical program, IBM SPSS Statistics version 25 (IBM Corp, 2019). Thereafter, prior to conducting the data analysis in response to the research questions for this study, cronbach's alpha analysis of reliability and test for normality were measured to ascertain the consistency and reliability of the scales.

To commence the main analysis, a one-way MANOVA and one-way ANOVAs analysis were conducted to determine the impact of acculturation on academic performance and adaptation to university. Secondly, a crosstabulation analysis was conducted to investigate the influence of school background on acculturation category. Lastly, independent sample t-test was conducted to investigate the impact of school background on academic performance and adaptation to university.

4.2 Descriptive Statistics

Reliability Measures and Test for Normality

The internal consistencies of adaptation to university scale for all four subscales utilised were reasonably good and acceptable (above .81). Considering the short length of the acculturation 2 x 4 item scale for both subscales, the internal consistencies were reasonably fair (above .59). This suggests that the items in the scales were not problematic. Further suggesting that items were utilised due to the acceptable item-total correlation of above .2. The reliability of the scales was proven to be reliable and therefore, the items could be utilised as a measure of the current research constructs.

The mean of the items in every scale included each participant's score on the scale. The distribution of participants' scores was tested for normality to ensure that there was normal distribution of data across the scales. Descriptive analysis was conducted to determine the skewness, coefficient and kurtosis coefficient of the adaptation scale and acculturation scale. Skewness and Kurtosis were both within the acceptable range of ± 2 , as deemed satisfactory in literature (George & Mallery, 2010; Gravetter & Wallanau, 2014). Table 2 below provides

Cronbach's Alpha, Means, Standard Deviation, Skewness and Kurtosis of each scale in the research study.

Table 2: *Cronbach's Alpha, Means, Standard Deviation, Skewness and Kurtosis for each scale*

Scales	No. of Items	Mean	Cronbach's Alpha	SD	Skewness	Kurtosis
Academic Adjustment	24	5.62	.87	1.18	-.008	-.183
Social Adjustment	20	5.33	.82	1.29	-.17	-.24
Personal-environment Adjustment	15	4.78	.85	1.52	.024	.14
Attachment	15	6.44	.81	1.37	-.56	.28
Home Orientation	4	3.20	.61	.86	.24	-1.43
Wits Orientation	4	3.14	.59	.51	.76	-.68

4.3 Inferential statistics

4.3.1 Acculturation strategy, academic performance and adaptation to university.

Does acculturation orientation have an impact on academic performance and adaptation to university?

Academic Performance

This question was answered using the whole sample of the current study. To investigate the impact of acculturation orientation on academic performance, a One-way MANOVA was conducted to investigate whether there was a difference in performance scores. These performance scores consisted of students' lowest and highest examination scores, their exam performance rating and their English proficiency rating. Thereafter, the individual ANOVAs for each variable was conducted.

Both Pillai's Trace ($F(12, 888) = 2.694, p < .001$) and Wilks' Lambda ($F(12, 778) = 2.756, p < .001$) were statistically significant indicating that the performance variables as a whole differed among the acculturation categories.

One-way ANOVAs

To ensure that the variances of each comparison group were equal; a test of homogeneity of variances was conducted as per ANOVA test requirement ($p > \alpha$). This was tested using the Levene statistics and the results showed that the Levene statistic was not significant ($p > .05$) based on a comparison of means for all the performance variables. This indicated that the data was robust and ready to be used, because the assumption of homogeneity of variance was met. Table 3, below, indicates the descriptive statistics for the variables under study.

Table 3: Descriptive Statistics

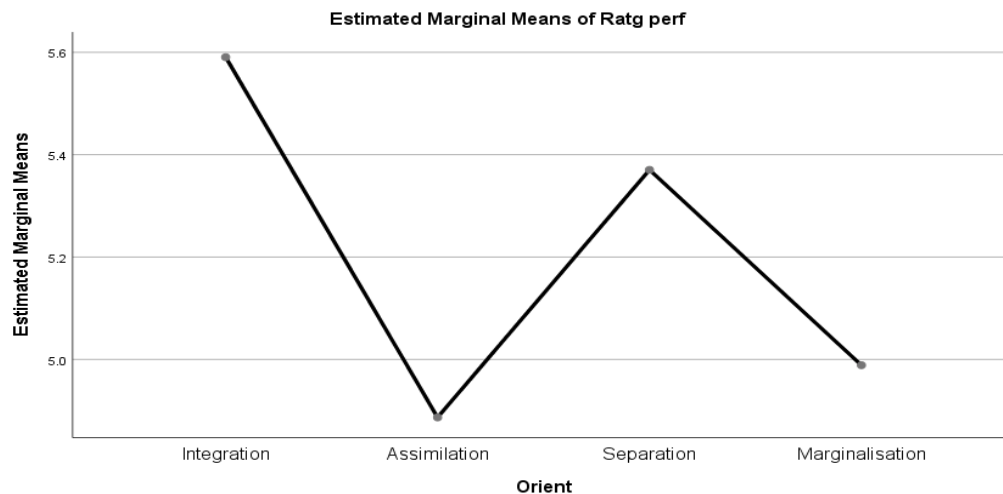
Performance scores	Orient	Mean	Std. Deviation	N
Highest%	Integration	71.56	9.942	105
	Assimilation	67.70	8.735	53
	Separation	71.37	8.843	54
	Marginalisation	70.17	11.569	89
	Total	70.44	10.125	301
Lowest%	Integration	53.01	12.566	105
	Assimilation	51.40	11.345	53
	Separation	53.72	11.596	54
	Marginalisation	52.15	11.650	89
	Total	52.60	11.884	301
Rating performance	Integration	5.59	1.769	105
	Assimilation	4.89	1.826	53
	Separation	5.37	1.617	54
	Marginalisation	4.99	1.910	89
	Total	5.25	1.811	301
English proficiency	Integration	4.30	.733	105
	Assimilation	3.77	.869	53
	Separation	4.24	.823	54
	Marginalisation	3.83	.869	89
	Total	4.06	.845	301

See appendix C, table 2. The One-way ANOVA results indicated that the differences in means across the acculturation categories were statistically significant for certain variables; self-rating

of exam performance ($F(3,297) = 2.688, p < .05$) and self-rating of English proficiency ($F(3,297) = 8.306, p < .01$).

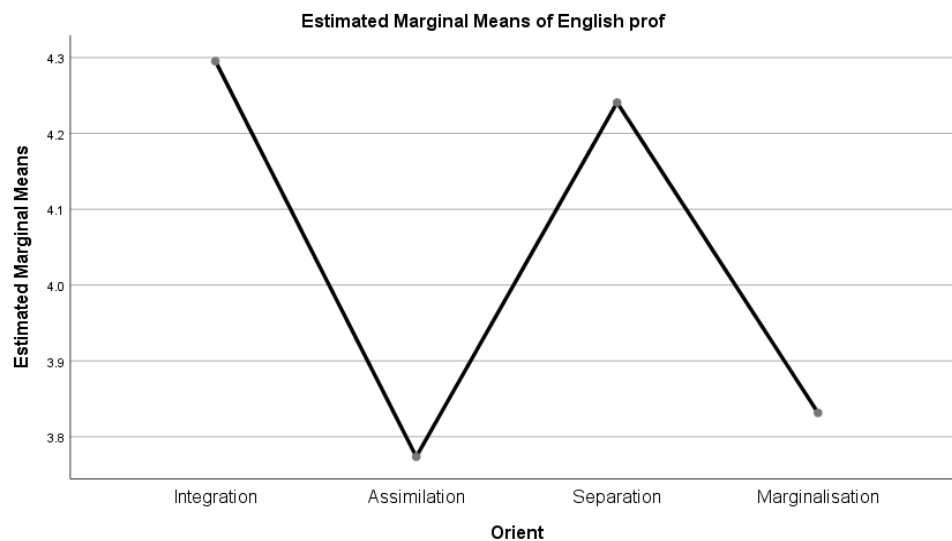
See Appendix C, table 3. A multiple comparison table from which the below pairwise comparisons information was derived.

Figure 2: Self-Rating of Examination Performance



The pairwise comparisons results indicated that the self-rated performance mean on the examination of students in the Integration category ($M=5.59$) was statistically higher than the mean of those in the Assimilation ($M=4.89$) and Marginalisation ($M=4.99$) categories. The differences between the mean of the Integration and Separation ($M=5.37$) categories did not reach significance, nor did the differences between the means of the Assimilation, Separation and Marginalisation categories.

Figure 3: Self-rating of English Proficiency



The pairwise comparison results further indicated that although there was no statistically significant differences between the mean of the Integration ($M=4.30$) and Separation ($M=4.24$) categories, their mean were both statistically significantly higher than the mean of students in Assimilation ($M=3.75$) and Marginalisation ($M=3.83$) categories. There were also no statistically significant differences between the mean of the Assimilation and Marginalisation categories.

Adaptation to university

One-way MANOVA was also conducted to investigate whether there was a difference in adaptation to university sub-scale scores. The adaptation scores were the students' responses to the subscale and full scale of SACQ, and the students' rating of how happy they are at university. Thereafter, the individual ANOVAs for each variable were explored.

Both Pillai's Trace ($F(18, 888) = 1.577, p = .059$) and Wilks' Lambda ($F(18, 832) = 1.579, p = .059$) were just above the 5% cut-off. It was decided that these were still worth exploring as individual ANOVAs.

One-way ANOVAs

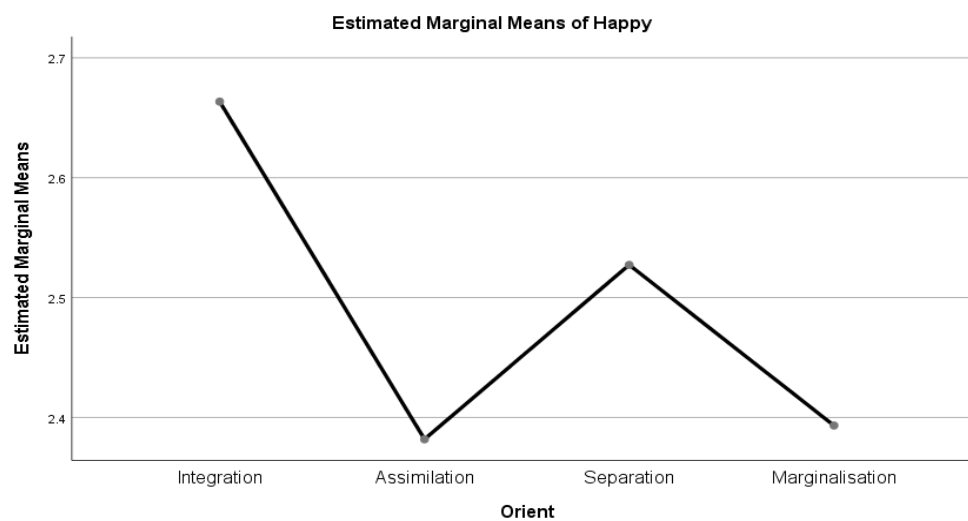
Levene's test of homogeneity of variances showed that the Levene statistic based on a comparison of means was not significant ($p > .05$) for all the adaptation variables. This indicated that the assumption of homogeneity of variances was met and the data was suitable to be used. Table 4, below, indicates the descriptive statistics for the variables under study.

Table 4: *Descriptive Statistics*

Adaptation to university	Orient	Mean	Std. Deviation	N
Happiness with the university	Integration	2.66	.796	104
	Assimilation	2.38	.805	55
	Separation	2.53	.858	55
	Marginalisation	2.39	.763	89
	Total	2.51	.805	303
Academic adjustment	Integration	5.8645	1.14918	104
	Assimilation	5.4474	1.12166	55
	Separation	5.4545	1.19164	55
	Marginalisation	5.5256	1.18209	89
	Total	5.6149	1.17049	303
Personal-Emotional adjustment	Integration	4.9878	1.51368	104
	Assimilation	4.4703	1.50480	55
	Separation	4.7745	1.68760	55
	Marginalisation	4.6989	1.42461	89
	Total	4.7703	1.52354	303
Social-Adjustment	Integration	5.5872	1.15538	104
	Assimilation	5.1362	1.53456	55
	Separation	5.3856	1.31480	55
	Marginalisation	5.1181	1.20359	89
	Total	5.3310	1.28491	303
Attachment to institution	Integration	6.6491	1.39719	104
	Assimilation	6.5685	1.32347	55
	Separation	6.2639	1.48248	55
	Marginalisation	6.2114	1.31036	89
	Total	6.4360	1.38253	303
Full adjustment scale	Integration	5.7182	1.03791	104
	Assimilation	5.3127	1.15136	55
	Separation	5.3992	1.11621	55
	Marginalisation	5.3477	1.02969	89
	Total	5.4779	1.08035	303

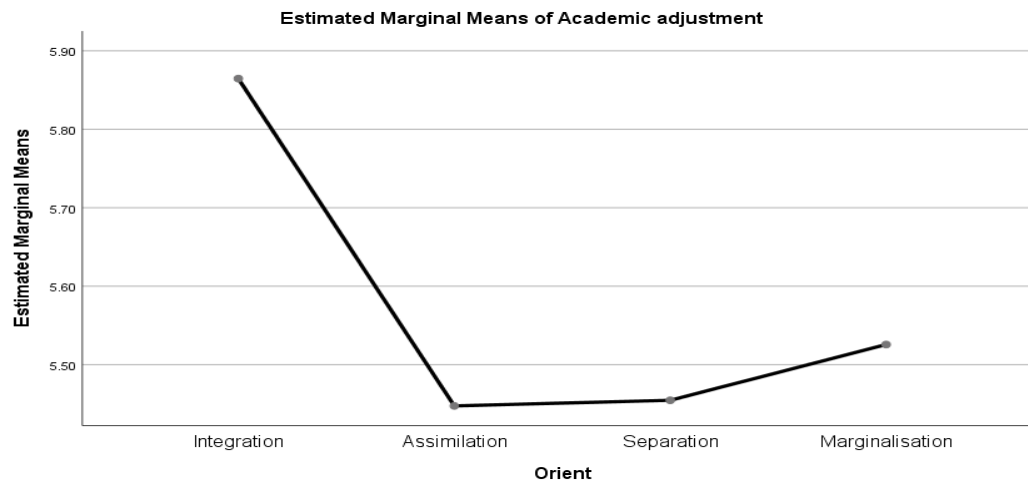
See appendix C, table 4. The individual ANOVAs results indicated that the F for the acculturation categories was statistically significant only for the Social Adjustment subscale ($F(3,299) = 2.691, p < .05$) and the full SACQ scale ($F(3,299) = 2.718, p < .05$). Happiness with the institution and the Academic Adjustment scale were not significant and therefore, pairwise comparison with all variables was conducted. The pairwise comparisons information below was derived from appendix C, table 5.

Figure 4: *Happiness with the institution*



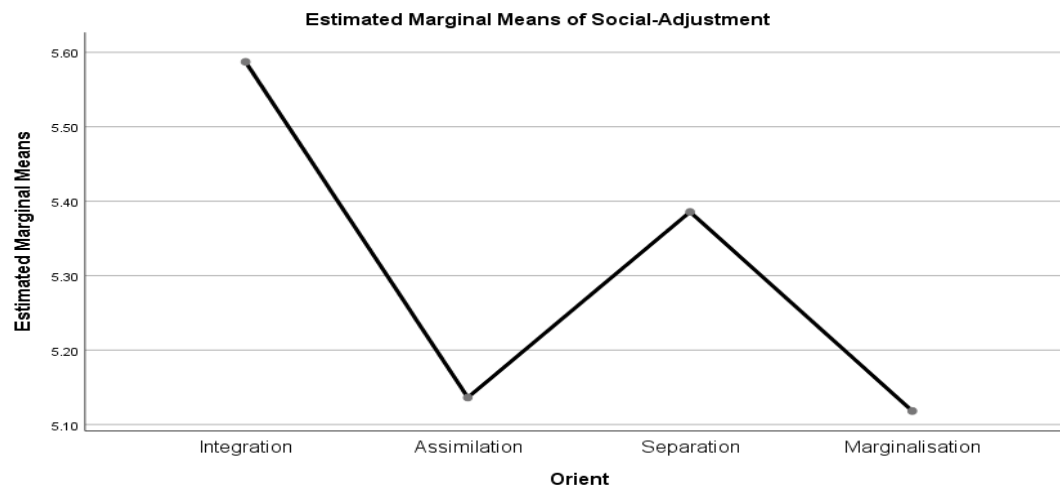
The pairwise comparison results indicated that Happiness with the institution scores for students in the Integration category ($M=2.66$) was significantly higher than those of the Assimilation ($M=2.38$) and Marginalisation ($M=2.39$) categories. There was no significance in the difference between the Integration and Separation ($M=2.53$) categories. There was also no significant differences between the mean of the Assimilation, Separation and Marginalisation categories.

Figure 5: Academic adjustment



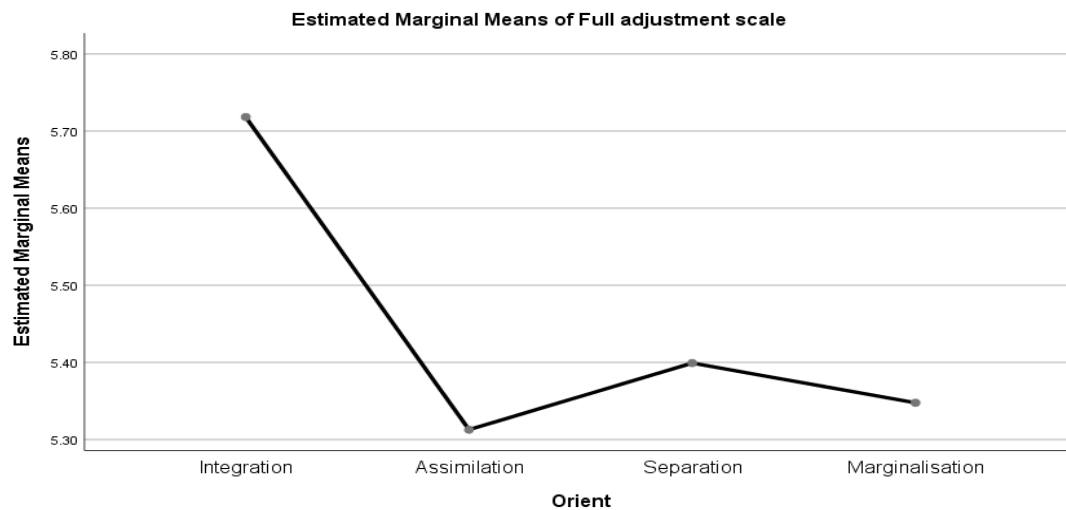
The pairwise comparison results also indicated that the Academic Adjustment scores for students in the Integration category ($M=5.86$) are statistically higher than those of; Assimilation ($M=5.44$), Separation ($M=5.45$) and Marginalisation ($M=5.52$) categories. There were also no significant differences in the scores of the three categories namely; Assimilation, Separation and Marginalisation.

Figure 6: Social Adjustment subscale



The pairwise comparison results further indicated that the social adjustment scores of the Integration category ($M=5.59$) was significantly higher than that of Assimilation ($M=5.14$) and Marginalisation ($M=5.11$) categories. There was no significant difference between the Integration and Separation ($M=5.38$) categories, as well as between the Assimilation and Marginalisation categories.

Figure 7: Full Adjustment Scale



Lastly, the pairwise comparison results indicated that the Full Adjustment scores of the Integration category (M=5.72) was significantly higher than the Assimilation (M=5.31) and Marginalisation (M=5.35) category. There was no significant difference between the Integration and Separation (M=5.40) categories, as well as between the Assimilation and Marginalisation categories.

4.3.2 School background and acculturation strategy

Is there a relationship between School quintile and acculturation orientation?

In order to understand the relationship between school background and acculturation orientation, a crosstabulation analysis was conducted. Crosstabulation analysis was suitable as it is used for categorical data. School background is categorised as low quintile school (schools in quintile one to three) and high quintile school (schools in quintile four and five). Acculturation strategy was then divided into four of the Berry's acculturation strategies, integration, assimilation, separation, and marginalisation.

Distribution of races across the acculturation categories and school quintile

To understand the distribution of Race in the categorised acculturation orientation, Race and acculturation orientation crosstabulation was conducted. The results of the chi-square reached significance ($\chi^2(9) = 64.408$, $p < .000$) and was established that 53% of the students that participated classified themselves under African Race. Table 5, below, indicates this distribution.

Table 5: Race and acculturation orientation crosstabulation

Race	Orientation					Total
		Integration	Assimilation	Separation	Marginalisation	
African	Count	43	45	12	58	158
	% within Race	27.2%	28.5%	7.6%	36.7%	100.0%
	% within Orient	42.2%	81.8%	22.2%	67.4%	53.2%
Coloured	Count	7	3	2	2	14
	% within Race	50.0%	21.4%	14.3%	14.3%	100.0%
	% within Orient	6.9%	5.5%	3.7%	2.3%	4.7%
Indian	Count	26	4	13	4	47
	% within Race	55.3%	8.5%	27.7%	8.5%	100.0%
	% within Orient	25.5%	7.3%	24.1%	4.7%	15.8%
White	Count	26	3	27	22	78
	% within Race	33.3%	3.8%	34.6%	28.2%	100.0%
	% within Orient	25.5%	5.5%	50.0%	25.6%	26.3%
Total	Count	102	55	54	86	297
	% within Race	34.3%	18.5%	18.2%	29.0%	100.0%
	% within Orient	100.0%	100.0%	100.0%	100.0%	100.0%

To understand the distribution of Race in the categorised two school quintiles, Race and school quintile crosstabulation analysis was conducted. There were 18.6% missing cases and therefore could not be included in the analysis but overall, the response rate was high (81.4%). Students that fell under the low quintile school background constituted 18% of the entire sample with majority being African Black Race and 0% being the White Race. Most of the students, 60.8% of the overall sample attended high quintile schools. Table 6, below, indicates the crosstabulation for race and school background.

Table 6: *The crosstabulation of race and school background.*

Race	School Quintile		Total
	Low	High	
African	45	81	126
Coloured	1	13	14
Indian	1	38	39
White	0	71	71
Total	47	203	250

The above results (table 6) indicate the diversity found in school quintiles among African students. It was clear that analysis based on school quintile will need to consider only African respondents due to the distribution of responses, indicating that African Black was the only race with students in both quintiles. Thus, the following analysis will be based on this specific sample only.

School background influence on acculturation category

A crosstabulation analysis was conducted to understand the influence of school background (school quintile) on student acculturation orientation. The chi-square analysis indicated that there is a strong association between the school quintile and acculturation orientation ($\chi^2(3) = 17.47$, $p < .001$). The results also indicated that 57.8% of students in low quintile schools are Marginalisation acculturation orientated. Only 21.0% of the participants from high quintile schools fall into this category. Moreover, the results indicated that, of students from high quintile school, an equal number is Integration (35.8%) and Assimilation (35.8%) acculturation orientated. This indicates that the same equal number of students value and accept both the university and home culture. Some rather value and accept only the university culture and reject their culture of origin. There is a small number of students in both low (4.4%) and high (7.4%) quintile schools that are Separation acculturation orientated. Table 7, below, indicates the distribution of acculturation categories in both school quintiles.

Table 7: *School background and acculturation strategies.*

School quintile	Orientation				Total
	Integration	Assimilation	Separation	Marginalisation	
Low	8	9	2	26	45
High	29	29	6	17	81
Total	37	38	8	43	126

The results also indicated that there were fewer students that completed their secondary schooling in low quintile schools (35.7%) as compared to those who went to high quintile schools (64.3%).

To establish where the differences between school quintiles lay, individual chi-square analyses were conducted on each of the orientation categories. Although both individual chi-square and continuity adjustment results are reported, the continuity adjustment was used to interpret the results. The first set of chi-square results indicated that there is a significant relationship between school quintile and Integration orientation. ($\chi^2(1) = 4.531$; $p > .033$). When the adjustment for continuity is used ($\chi^2(1) = 3.704$; $p = .05$). Therefore, it can be concluded that there is a significant relationship between school background and Integration category. There is also a higher percentage of high quintile school background students (35.8%) in the Integration category than there is in the low quintile school background (17.8%).

The second set of analysis aimed at evaluating the association between the school quintile and Assimilation orientation. The Chi-square analysis was not significant ($\chi^2(1) = 3.430$; $p = .064$; with continuity adjustment $\chi^2(1) = 2.720$, $p = .099$). This means that there was no significant difference between the percentage of students in the Assimilation category from the low quintile schools (20.0%) and high quintile schools (35.8%). Furthermore, the third chi-square analysis for Separation orientation was also not significant ($\chi^2(1) = 0.427$, $p = 0.513$; with continuity adjustment $\chi^2(1) = 0.074$, $p = .785$). Therefore, there was no association between both school background and the Separation category. It can also be concluded that the percentage of students from both school quintiles in the Separation orientation did not significantly vary; low quintile school (4.4%) and high quintile school (7.4%).

The last set of Chi-Square analysis conducted was to evaluate the association of school background and Marginalisation category. The chi-square results were found to be significant.

They indicated an association between school quintile and Marginalisation orientation ($\chi^2(1) = 17.417$, $p < 0.000$; with adjustment for continuity, $\chi^2(1) = 15.819$; $p < 0.00$). A significantly high percentage of students from low quintile school (57.8%) compared to high quintile school (21.0%) fell into the Marginalisation orientation.

4.3.3 School background and academic performance.

Does School quintile have an impact on academic performance?

To investigate the relationship between school background, academic performance and adaptation to university, an independent sample t-test was conducted to compare the means of school background categories, academic performance and the adaptation to university dimensions. The equality of variance was tested by homogeneity of variances Levene's test ($p > .05$). The set of t-tests illustrated the mean difference between academic performance and school background (school quintiles). School quintiles were divided into two categories, low quintile schools (consisting of quintile one, two and three schools) and high quintile schools (consisting of quintile four and five schools).

The variables used to measure academic performance included the highest and lowest percentage achieved in the midyear examination, students' rating of their performance, and their rating of their English proficiency. Figure 8 (below) presents the group statistics of the variables under study in this section.

Figure 8: *Mean: Academic performance*

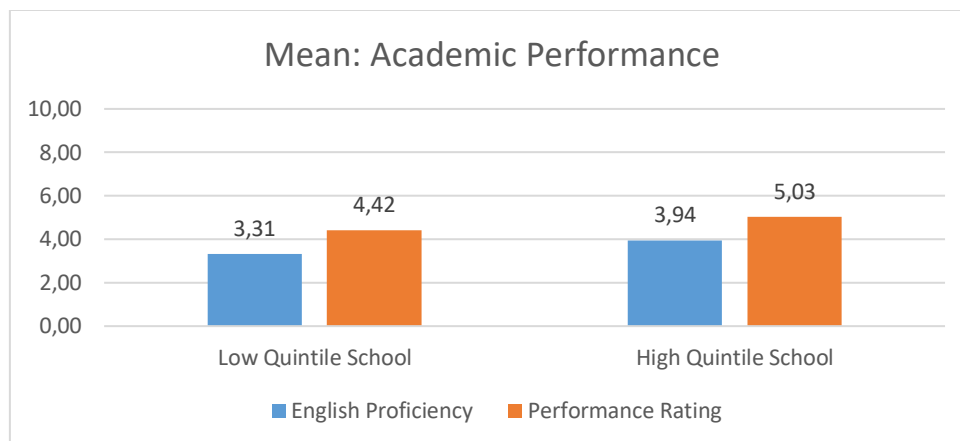


Figure 9: *Mean percentage: Academic performance*

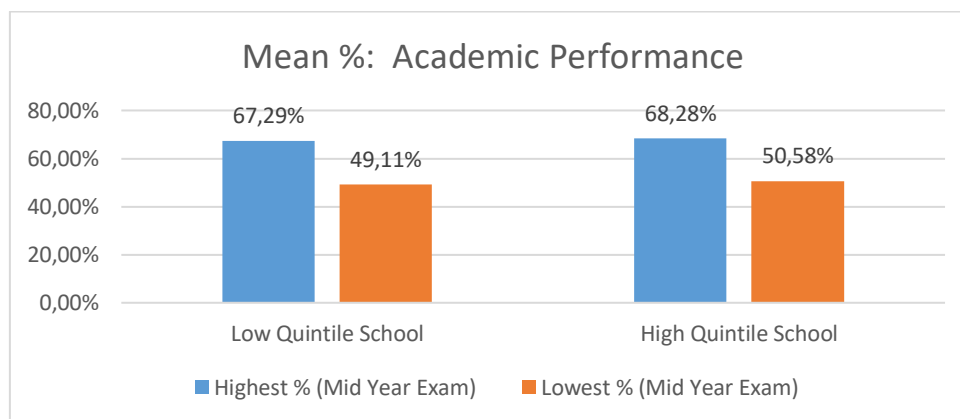


Table 8: *Independent Samples Test for academic performance*

		Levene's Test for Equality of Variances		t-test for Equality of Means		
		F	Sig.	t	df	Sig. (2-tailed)
English prof	Equal variances assumed	3.069	0.082	-4.416	124	0.000
Highest%	Equal variances assumed	0.559	0.456	-0.547	123	0.585
Lowest%	Equal variances assumed	0.013	0.909	-0.712	123	0.478
Ratg perf	Equal variances assumed	1.168	0.282	-1.774	123	0.079

The assumption of homogeneity of variances was supported for all the variables. The t-tests table 7, above, indicated that there was no significant difference between the mean highest percentage of the low quintile school ($M=67.3\%$) and that of the high quintile school ($M=68.3\%$) ($t(123) = 0.547$, $p=.585$). Similarly, there was no significant difference between the mean lowest percentage of the low quintile school ($M=49.1\%$) and that of the high quintile school ($M=50.6\%$) ($t(123) = 0.712$, $p=.478$). The participants' rating of their performance across the quintiles did not reach significant; low quintile school ($M=4.42$) and high quintile school ($M=5.03$) ($t(123) = 1.774$, $p=.079$). However, there was a statistically significant difference between the participants' rating of their English proficiency across quintiles; low quintile school ($M=3.31$) and high quintile school ($M=3.94$) ($t(123) = 14.416$, $p=.000$).

4.3.4 School quintile background and adaptation to university.

Does school quintile have an impact on adaptation to university?

Figure 10: *Adaptation to university*

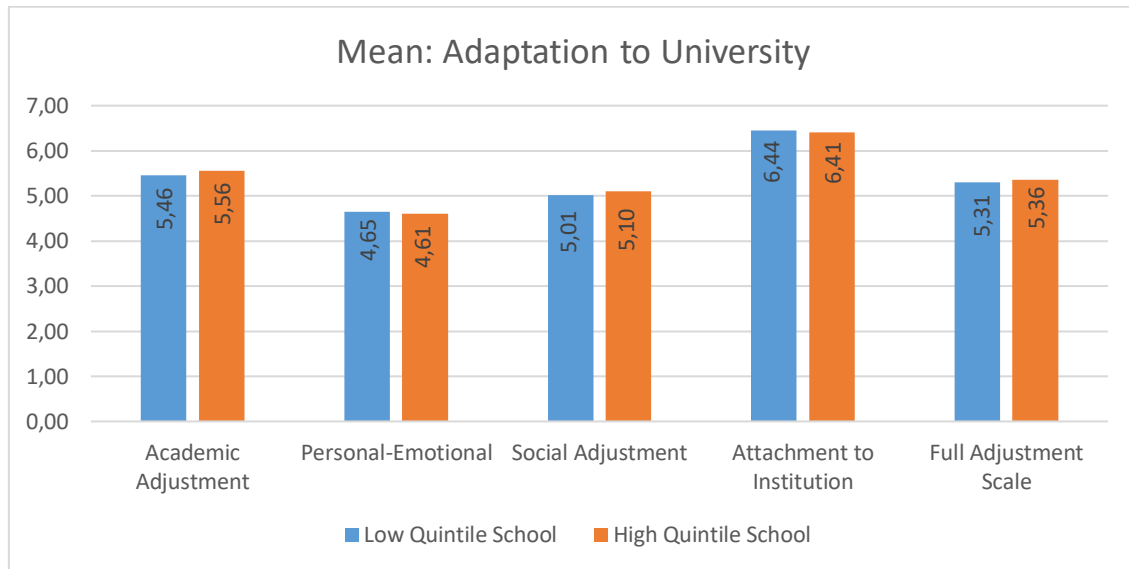


Table 9: *Independent Samples Test for adaptation to university*

	Levene's Test for Equality of Variances		t-test for Equality of Means		
	F	Sig.	t	df	Sig. (2-tailed)
Academic adjustment	0.206	0.651	-0.482	124	0.630
Personal-Emotional adjustment	0.522	0.471	0.134	124	0.894
Social-Adjustment	1.786	0.184	-0.380	124	0.704
Attachment to institution	0.308	0.580	0.131	124	0.896
Full adjustment scale	0.898	0.345	-0.291	124	0.771

The assumption of homogeneity of variances was also supported for all the variables that were studied. All the adaptation to university variables did not reach significant results, but they were as follows; school quintile as an independent variable ($p > 0.05$), academic adjustment ($t(124) = -.482$; $p = .630$), personal-environment adjustment ($t(124) = .134$; $p = .894$), social adjustment ($t(124) = -.380$; $p = .704$) and attachment ($t(124) = .131$; $p = .896$). Other variables,

such as the student's happiness at the university ($t(124) = .800$; $p = .425$), were also not significant.

School quintile characteristics

In order to understand the differences in school quintile characteristics, percentile analysis was conducted. This was in order to understand the different school background environmental surroundings that could influence student adaptation to university. Below are differences between the two variables that were found statistically significant, $p < .01$.

Table 10: *School quintile differences*

	Low quintile schools	High quintile schools
Mixed Race	20%	72.8%
English the language of tuition	77.8%	93.8%
Computers	37.8%	66.7%
Sports facilities	60%	82.7%

4.4 Chapter summary

1. Majority (66.1%) of the students that participated on the survey were from high quintile school background (quintile four and five), whereas the rest (15.3%) were from low quintile school background (school quintile one, two and three). The missing cases amounted to 18.7%.
2. From the 15.3% of students in low quintile school background, 57.8% of them were Marginalisation acculturation orientated whereas of the 81.2% of the students in high quintile school background, 71.6% of them were Integration and Assimilation acculturation orientated. Indicating that school quintile does have an impact on acculturation orientation.
3. The impact of integration orientation on academic performance was also found statistically significant. Students that are integration orientated reported high English proficiency and examination performance. Integration orientation was also significantly associated with adaptation to university full scale and social adjustment. Students that are assimilation orientated reported low English proficiency and

examination performance as well as low social adjustment and full adaptation to university.

4. Overall, using the Black African Race sample, the results indicated that there is a relationship between school background and acculturation category. Results indicated a significant relationship between high quintile schools and integration orientation. The relationship between Low quintile schools and marginalisation orientation was also significant.
5. Using the Black African sample, results further indicated that school quintile has an influence on academic performance, mainly on English proficiency but does not influence student's adaptation to university.

CHAPTER 5: DISCUSSION

5.1 Chapter Introduction

The primary focus of this chapter is to discuss the research results reported in the previous chapter. These results will be discussed and complemented by extant literature. Firstly, the research questions and other possible variables that contributed to the results of the study will be discussed. Thereafter, implications of the study will be discussed, followed by limitations and lastly future recommendations for research.

5.2 Acculturation strategy, academic performance and adaptation to university

Does acculturation orientation have an impact on academic performance and adaptation to university?

One-way MANOVA and one-way ANOVAs were conducted to understand the impact of acculturation orientation on academic performance and adaptation to university.

Regarding academic performance, Bothe Pillai's Trace and Wilks' Lambda were both found significant. This indicated that the academic performance variable scores differed. The lowest and highest examination scores, exam rating performance scores and English proficiency scores differed across the four acculturation orientations. This is aligned with literature that suggests that one's acculturation orientation informs their academic behaviour and academic performance (Berry & Chataway, 1989; Petersen et al., 2009; Smit, 2012). Literature also indicated that the acculturation strategy associated with improved or good academic performance is the integration orientation (Lee, 2016). Literature further indicated that marginalisation orientation is associated with increased acculturative stress and possible academic failure (Ali et al., 2013).

The One-way ANOVA results indicated significant difference between means only for two variables, self-rating of exam performance and self-rating of English proficiency. Self-rating exam performance scores for students that are integration orientated was significantly higher than students that are assimilation and marginalisation orientated. It is expected that integration orientated students would rate their examinations high as per the literature provided (Howie, 2011). It is also expected for marginalisation orientated students to report low academic performance due to the likelihood of not showing interest in the ways of living in the society of settlement (Friesen, 2015). Research indicated that students from high quintile schools are

most likely to be integration orientated due to their familiarity with the society of settlement. Therefore, students from high quantile schools are likely to have a positive outlook on educational outcomes. This is unlike marginalisation orientated students that are most likely to have a negative outlook on educational outcomes due to their lack of familiarisation with the society of settlement (Barber & Mourshed, 2007; Howie, 2011).

However, it is unexpected for students that are assimilation orientated to have the lowest score, as literature indicate that this acculturation involves moderate acculturative stress and academic performance (Friedlander et al., 2007). It can therefore be proposed that students that are assimilation orientated are more focussed on fitting in, so much that they forget the motive for migration (getting a qualification), or they might have had other ulterior motives. There was also no statistical difference in means between integration and separation, but the scores were also significantly high.

Regarding adaptation to university, although, Bothe Pillai's Trace and Wilks' Lambda were not significant, they were worth exploring. One-way ANOVAs results indicated a significance for the full SACQ scale and social adjustment subscale. The pairwise comparison indicated that students that are integration orientated were happy with the institution as compared to students that are assimilation and marginalisation orientated. This is an indication of familiarity, positive outlook and low levels of acculturative stress experienced by students that are integration orientated as opposed to students in other orientations (Briggs & Wohlstetter, 2003; Howie, 2011; Schleicher, 2009).

There was also no statistical difference between separation orientation and integration orientation. Assimilation and marginalisation orientations are coupled with internal conflict due to a lack of interest in the society of settlement or rejection by own culture of origin (Bai, 2015; Mulla, 2014). This suggests the importance of maintaining one's culture. Integration orientation students also reported better academic adjustment than the three other orientations (Myers-Walls et al., 2011). Significant results regarding social adjustment indicated that integration orientated students socially adjust better than those that are marginalisation and assimilation orientated. The difference between integration and separation scores were not significant, indicating the importance of support whether by school mates (integration) or by family members (separation) (Friedlander et al., 2007; Mena et al., 1987; Nel et al., 2009).

Integration orientated students further reported better adaptation to university compared to assimilation and marginalisation orientations. There no significant difference between

integration orientation and separation orientation. The answer to the current research question is that integration orientation is the best predictor of academic success and adaptation to university. Separation orientation is also desirable and associated with better academic performance and adaptation to university.

Research indicated that a combination of integration and separation orientation is beneficial for young immigrant positive adaptation and academic performance (Berry et al., 2006). According to Bilal et al., (2012), integration strategy is associated with high probability of positive academic adjustment, social adjustment, personal (emotional) adjustment and overall attachment with the university. This is in agreement with many scholars that have identified integration as the preferred acculturation orientation due to the positive benefits that make students smoothly transition from secondary to university (Chataway & Berry, 1989; Kuo, 2014; Lee, 2016; Mudhovozi, 2012; Petersen et al., 2009; Ward & Raba-Deuba, 1999; Yu & Wang, 2011). Therefore, acculturation orientation does have a significant impact on adaptation to university mainly socially and does have an influence on academic performance.

5.3 School background and acculturation orientation

Is there a relationship between school quintile and acculturation orientation?

Crosstabulation analysis indicated a strongly significant association of school background on acculturation orientation. Prior to conducting the above results, distribution of race was run in order to understand the distribution of school quintiles. The distribution of school quintile versus race was highly skewed. Therefore, the study used Black African respondents only, to answer school quintile questions, this indicates that these findings only apply to this race only. This is also a positive indication for inclusivity in universities (Langa et al., 2017). The results indicated that there is a relationship between school background and acculturation orientation.

Integration orientation

The association between school background and integration orientation was found significant in this study. This suggests that school quintile has a significant association with acculturation orientation. Furthermore, students may feel at home in both environments; society of origin and society of settlement. Integration is more predominant for students from high quintile school background with 35.8% of the students being integration orientated. This acculturation is mostly preferred in the high quintile school background. This is aligned with the research conducted by ICSEY on immigrant youth in 13 countries. The research indicated that

integration is the prevalent strategy (Berry et al., 2006). Owing to affiliation, students from high quintile schools integrate better compared to students in low quintile schools. This is in agreement with numerous research that indicated that students from high quintile school background are more likely to integrate because they are more equipped with resources to overcome challenges and pressures in order to achieve set goals (Burgess et al., 2009; Friesen, 2015; Kuo, 2014; Ward & Rana-Deuba, 1999). Due to the lack of resources during their secondary schooling, only a few students (17.8%) in low quintile school background, are integration orientated. However, 17.8% is a good percentage for students that are disadvantaged. It is possible that their integration acculturation orientation was through conscious efforts and resilience (Howley et al., 2009; Hlalele, 2012; Malhoit, 2005; McLaren, 2017). It is also possible that their integration is due to orientation programmes offered by the university for students residing on campus as per the theoretical framework of the study (Friedlander et al., 2007; Roman, 2014; University of Witwatersrand, 2018). Integration orientation is also accompanied by constant positive outcomes than three of the other orientations namely; separation, assimilation and marginalisation (Berry, 1997; Kuo, 2014; Naidoo & Mahabeer, 2006).

Assimilation orientation

The results indicated that there was no significant association between school background and assimilation orientation. Contrary to previous research that suggested that assimilation is the least preferable orientation, in the current study there was no significant relationship between the two variables (Berry et al., 2006). These results were unexpected as students from low quintile school background would be expected to be assimilation orientated. Previous research indicated that immigrants are most likely to adopt assimilation orientation and are reluctant to participate in culture awareness activities because they want to hide their origin (Friedlander et al., 2007). Psychological literature and acculturation argue that assimilation orientation is characterised by moderate accumulative stress and devaluing of own culture (Stathi & Roscini, 2016). Results for the current study indicated that there are more assimilation orientated students from high quintile school background (35.8%) and few students from low quintile school background (20.0%). These results suggest that most students from high quintile schools are most likely to feel at home when they are in the university than they do when they are at home or culture of origin. These results might need to be further researched as it is assumed not common for a student that originates from an affluent background to want to hide their identity. However, students from either low or high quintile school background might be

looking for homogeneousness. This could be their coping mechanism to succeed in the host culture and avoid intergroup tensions (Berry, 1997; Burgess et al., 2009).

Separation Orientation

The interaction between separation orientation and school background was not found significant. The results for this study also indicated that separation orientation is the least preferred strategy for both; students from low quintile school background (4.4%) and high quintile school background (7.4%), constituting 11.8% of the sample. This is contrary to a study by Berry et al. (2006) on youth immigrants. The study indicated that separation orientation is the second most preferred strategy (Berry et al., 2006). It is associated with cultural maintenance of one's origin and is characterised by pride and undisputable values. However, taking into consideration the societal settlement of the current study, it is no surprise that only few students are motivated to uphold the values of their society of origin. As results indicated that few students from both quintiles feel at home in the society of origin than at university and majority from high quintile schools. For some students the involuntary isolation from the university culture might be as a result of experiencing prejudice, inequity and discrimination, whereas for some it might be due to personal aspirations or desires that are not reflected by the university culture (Bai, 2015; Berry, 1997; Berry et al., 2006).

However, some scholars support the findings that separation orientation is the least preferred acculturation. Lee (2016) also argues that separation acculturation can have negative consequences on academic performance as one volitionally chooses to isolate themselves from the society of settlement and inevitably fails to benefit from social support, which is essential for university survival. Literature refer to students that are separation orientated as separatists and indicates that they are least likely to acculturate successfully in school setting (Sam & Berry, 2010).

Marginalisation Orientation

The results indicated a significant interaction between school background and marginalisation orientation. Suggesting that school quintile does have an association with marginalisation orientation. This acculturation orientation is more prominent in the low quintile school background category (57.8%) than high quintile school background category (21.0%). This indicates that most students from low quintile schools do not feel at home in both their home community and university community than students from high quintile schools. This also speaks to the lack of belongingness that low quintile schools experience. It can suggest that

majority of students experience discrimination in the communities of their origin due to being perceived as “well-off” since they moved to cities and are receiving an education which is a rare commodity for majority of people in disadvantaged areas (Ali et al., 2013; Myers-Walls, 2011; Naidoo & Mahabeer, 2006).

Mutually, Berry et al. (2006)’s research on immigrant youth reported that acculturation orientation is more prominent for the inferior status group. When two groups interact, the economically inferior group is left to suffer discrimination and low social standing (Berry et al., 2006). This can explain the reason why some students would rather not associate with both; society of settlement and society of origin. This is most likely to be used as a coping mechanism (avoidance) to dealing with acculturative stress and resentment of the university community and home community (Taylor & Yu, 2009; Ward & Rana-Deuba, 1999). On the other end, students that are from high quintile school background and are marginalisation orientated could be due to the need to create their own cultural identity (Myers-Walls, 2011). University context provides students with the freedom to create their own ways of living. Therefore, students are more likely to reject both cultures in pursuit of their own identity, specifically if the institution is situated in Johannesburg.

5.4 School background, academic performance and adaptation to university

Does school quintile have an impact on academic performance?

Does school quintile have an impact on adaptation to university?

Independent sample t-tests were conducted to investigate the impact of school background on academic performance and adaptation to university. As expected, there was a significant interaction between school background and English proficiency as per literature (Berry, 1997; Foy et al., 2010; Myers-Walls et al., 2011; Van Dyk et al., 2013). This indicates that school quintile does have an impact on student academic performance. Group means suggested that students from high quintile school background are better at English language proficiency compared to students from low quintile school background. This is aligned with many other studies on school background and academic performance or English language proficiency in South Africa (Gardiner, 2008; Roodt, 2018; Spaull, 2013b; Scott et al., 2007). Students from high quintile school background are inevitably affluent in English due to their previous constant exposure to the language at school and interacting with some of the students who consider the language as their native language (Barber & Mourshed, 2007; Heystek, 2011; Schleicher, 2009). Therefore, school background impacts one’s English language proficiency and

inevitably academic performance. This indicates that school background does account for academic failure and potentially drop out at university.

The current study also found a strange inverse relationship between school background and adaptation to university. Although the different group means illustrated interaction between the two variables, the interaction is not significant. This suggests that school background has slight or no impact on student's adaptation to university. There is no literature supporting these results. Majority of the previous research findings is contrary to the results established by the current study (Gardiner, 2008; Hugo et al., 2010; Levein, 2007; Sennett et al., 2003; Spaull, 2013b; Smit, 2012). This needs to be investigated further, if it is not a methodology error. Also taking into consideration the context and time in which the study's data collection was conducted; the university of the Witwatersrand has first year students orientation programme (as previously stated) that runs during the first few weeks prior to commencing the university classes. The data collection for this research study occurred six months since the university classes had begun. There is a possibility that the mediation that occurred before data collection influenced the results. This indicates that there might have been tertiary adaptation initiatives influencing the results as per the theoretical framework of the study. Hence the results may be inverse. Furthermore, variables influencing adaptation to university might include demographic variables that were not analysed in this study.

School quintile differences

One interesting result was the different contexts found in both low quintile and high quintile schools. These differences were found statistically significant. The variables under study included; mixed race, English the language of tuition, computers and sports facilities. The significant differences indicated that both school quintiles have different school environmental surroundings that have a potential to prolong or act as a catalyst for adaptation to university.

According to literature, low quintile schools; lack resources such as computers, are non-consistent in the usage of English, they lack sports facilities to enable better adaptation capabilities and they do not have mixed races (Mbiza, 2018; McLaren, 2017; Mestry & Ndhlovu, 2014; Redding and Walberg, 2012). For this study, low quintile schools had mixed race percentage of 20% whereas high quintile schools had 72.8%. These statistics provides clear evidence or support for Integration and Marginalisation acculturation orientation for both students from advantaged and disadvantaged school background.

With also the 37.8% of computer usage for low quintile schools as opposed to the 66.5% for high quintile schools, there should be an impact on how the different students adapt. Students from low quintile school background need to start with learning basic skills for computer usage whereas students from high quintile schools are already familiar with the systems. English the language of tuition and sports facilities for high quintile school background was also significantly high. This could have an impact on how students acculturate at higher education. With the above mention school quintile characteristic and significant differences, it is unexpected that a non-significant result was found. Therefore, an assumption can be made that the first year student tertiary adaptation initiatives had an impact on the results obtained.

5.5 The role of socio-demographics

Students constantly fight acculturative stress and other stressors in their attempt to negotiate a healthy acculturation into the university. In order to reach a sense of belonging, other students use avoidance strategy to avoid being conflicted with their own culture. Others create their own cultural identity that they can affiliate with, instead of being affiliated with both cultures. Lastly, others turn off university ideas to maintain their own cultural identity. All of these in attempt to have a sense of belonging. However, socio-demographic variables such as age, gender, residence and socio-economic status are all acknowledged as inevitable causes of variation (Berry et al., 2006). They can inevitably influence how one acculturates and adapt to university (Mulla, 2014). These socio-demographic variables are indicated as individual and group level of acculturation as per the theoretical framework of the study.

Although the role of age on academic performance is low, Clinciu (2013) indicated that the journey of adaptation to university for students that are over 20 years of age or mature is better compared to students that are younger due to maturity. Naidoo and Mahabeer (2006) also indicated that individuals acculturate better when they are younger (15-25 years) as compared to older students with pre-existed mental models. The majority of students that participated in this study were relatively young (18 years to 22 years of age). This could explain the results obtained in this study for both acculturation orientation and adaptation to university.

Residential characteristic is also seen as having an impact on how a person acculturate. Clinciu (2013), further indicated that residing in an urban area can have a positive influence on one's acculturation and adaptation to university. Residing in a highly secluded rural area is associated with high probability of marginalisation orientation. Whereas residing in or near the city is associated with integration orientation due to cultural familiarity. It is assumed, using the

acculturation questionnaire and school quintile, that majority of the students were not from remote rural areas. As a result, majority of the respondents were from high quintile school background.

Gender is also considered to have an impact on acculturation and adaptation to university (Mudhovozi, 2012). Literature indicated that, in the German society; due to female acceptance, women are more inclined to being integration orientated and men marginalisation and separation orientated (Berry et al., 2006). Another study conducted in Vietnamese suggested that women are more integration orientated than men (Berry et al., 2006). Research also provided evidence that males are slightly better at psychological adjustment than females. However, females are better at sociocultural adjustment (Berry, 1997; Laher & Pillay, 2014). The current study consisted of more females than males. Therefore, inferences could be made on the prominent social adjustment and integration orientation significance. There is a social adjustment significance and preference for integration orientation, and this could have been influenced by the many female respondents in this study.

5.6 Theoretical and practical research implications

The results of this study are in line with the other literature on acculturation theory. Internationally and locally; research has proven that one's background impact their acculturation orientation (Berry, 1990;1997). Inevitably, secondary school background has an influence on one's acculturation strategy at higher education level. It further confirms that cultural distance between the culture of origin and host culture can impact one's cognitive (academic) performance (Berry et al.,2006). The strong preference for marginalisation orientation illustrates the degree of cultural distance between society of origin and society of settlement. Other variables such as; personal, socio-demographic and tertiary adaptation orientation programmes, can be held accountable for the insignificant results that were obtained on school background and acculturation orientation's influence on adaptation to university and academic performance (Berry, 1990, 1997). This study is also aligned with previous literature that indicated that integration acculturation strategy is the most prevalent across four acculturation strategies (Bai, 2015; Berry at al., 2006; Friesen, 2015; Lee, 2016; Petersen et al., 2009; Ward & Rana-Deuba, 1999). The most significant acculturation orientation in the current study was the integration orientation. Marginalisation orientation might be a reason for academic failure and low completion rate at universities and this is prominent for students from low school quintile (Bai, 2015).

Post the apartheid regime, the government, based on democracy, ensured that South African youth are provided with the opportunity to enrol both in basic and higher education (Hlalele, 2012; Malhoit, 2005; Naicker, 2011; Redding & Walberg, 2012; Taylor et al., 2008). In approximately ± 500000 students that enrol for higher education, majority of them are Black Africans; a race that was previously disadvantaged. Therefore, it is imperative to not only support them financially, but; to ensure their retention and completion, they need to be supported for their general socio-emotional needs and academic success (Taylor et al., 2003). There is a need for more higher education institutions to develop receptive and informed programmes to bridge the culture distance that has been influence by the South African historical background. However, this objective will be challenging if there is no understanding of what influences students' behaviour. Thus, the importance of this research study.

The objective of this study was to influence the formation of initiatives that will assist not only high institutions but also initiatives in secondary education. This study aimed at understanding students' academic failure and its roots. The results of this study indicated that, although the school quintile background has an influence on the student's acculturation orientation and academic performance, it does not directly have an impact on student adaptation to the university and this could be due to other variables. However, the acculturation orientation influence on adaptation to university was found significant. Suggesting that school background informs acculturation strategy and acculturation orientation influences how the students adapt to university. This inevitably influences their academic performance, on a larger scale. One of the conclusions made by the study is that; there is an importance for higher institutions and secondary school institutions to encourage initiatives that will positively impact students' acculturation process.

Higher institution

The first suggestion aimed at assisting students' acculturation is that; there should be a tailored programme specifically for two different school quintile backgrounds. A programme to acculturate students into university already exists in the majority of South African universities. However, they are generally tailored and there is a need for a specific focus due to the past different inequalities. The two programmes would be for students from low quintile school background and high quintile school background. These groups have to discuss relevant university experiences and make different education level comparisons. This programme must initially address two different context and later unite the two programmes to encourage support

and intercultural engagement, additional English language programmes and a sense of belonging. The separation might create discrimination by the other but it will be better to have the initiative than to face the consequences of inappropriate acculturation or adaptation to university. This could prevent a high number of first-year university students' dropout, through an improvement in student retention and student adaptation. This programme can also be made optionally available to the students throughout their career journey, to ensure healthy acculturation in every step of their career.

Furthermore, the awareness of healthy acculturation should not only occur in the programme but must also be encouraged in the lecture rooms. Universities need to constantly make lectures or instructors aware of the emotional shifts and acculturative stressors that students experience (Thomas & Quinn, 2007). Therefore, instructors need to be aware and understand their own attitudes. They also need to be aware of their lecture room practices and the acculturation strategy that they are encouraging. Petersen et al. (2009) suggested that instructors that do not respect rural or other ways of living, except western are more likely to elicit disengagement and resentment from students that do not fall under western living category. In the current study, this can also explain the vast number of students that are marginalisation orientated. Instructors need to consider different ways of thinking and articulating their perceptions without diminishing rural living.

Secondary institution

Research provides evidence that, teacher or educator incompetency is one of the challenges faced in the education system (Ball et al., 2008; Mbiza, 2018; Spaul, 2013b). This is due to a lack of teachers which subsequently leads to compromising teacher requirements (Briggs & Wohlstetter, 2003; Cloete, 2009; Roodt, 2018). In order to improve equality in the classroom and prioritise quality education, the department of education is urged to have high standards for teachers. High standard for teachers is one of the factors encouraged by countries that have top-ranked education systems (Ball et al., 2008). For instance, Finland has one of the best education systems and has relatively high teacher requirements (Blignaut et al., 2015). One needs to have a master's degree certificate in order to qualify as a teacher (Blignaut et al., 2015). The department of education in South Africa can also increase awareness on the importance of becoming a teacher by making funding readily available even for people in remote areas where knowledge is scarce. Alternatively, they can include progressive lessons in the curriculum in order to attract people to study towards teaching.

The department of education needs to also consider seeking advice from other African countries that have good curriculum, such as; Swaziland, Zimbabwe and Kenya. More research is needed on how the education system can be improved in both content and resources (Ball et al., 2008). Another recommendation is to adapt curriculums and models utilised in private high quintile schools or at least research on how both public and private schooling can work together to build a collective education system. Private independent schools only make five percent of the school population, but it is ranked the top (Mbiza, 2018; Roodt, 2018). Results from the current study show that students from high quintile schools are more inclined to being integration orientated and are at a better position to perform well academically. Another recommendation is that there is need to create more exposure to life after secondary schooling. This exposure must go beyond winter visits and include continuous university life orientation programmes for the students that desire to enrol at a university.

5.7 Limitations of the study and recommendations

Although the current study attained significant results, some of them were incongruous in comparison to previous literature. Therefore, it is of utmost importance to acknowledge the limitations of the current study. This section will discuss the constraints and shortcomings of the current study and possible mitigations for future studies.

The primary limitation was generalisation and transferability. The usage of students from the University of the Witwatersrand does not validate representation of the whole South African universities' first-year population. Due to accessibility, majority of the participants were from the Psychology Department, making the results relatively invalid for students in other faculties such as Law, Accounting (Management sciences) and Health Sciences. Furthermore, this survey was emailed during exam time and only psychology students had an incentive motivation to spare 15 minutes to complete the survey. This questions the generalisation and transferability of the results of the study. It challenges the extent to which these results can be used in other university contexts for other students enrolled in other faculties (Burns & Burns, 2008; Salkind, 2006).

Another vast limitation was on the composition of the sample. Majority of the participants were students from high quintile school background (quintile three to five). There was no equal representation for school backgrounds categories. Therefore, this could have impacted the results as this study aimed to investigate both categories and how they impact the research variables. Additionally, race also played a role in the results obtained. Majority of the

respondents were Black African; that means these results cannot be generalised to other races. This is due to the different cultural backgrounds that could impact students' acculturation differently.

Future studies may avoid the above by; firstly, targeting the whole university population. This can be done by requesting permission in all different faculties and working together to encourage survey completion. This must be done prior or post exam period to ensure the availability of students. Secondly, future studies can expand the research, by including other institutions. This can be done by involving an equal share of universities that were previously western and universities that are deemed purely South African. They must also include equal representation from both students from low quintile schools and high quintile schools.

The other limitation was on the methodology. Firstly, the sample size of 307 is not ideal for a total population of at least 11000 first-year students accepted yearly into the University of the Witwatersrand, as per the student enrolment (Wits integrated report, 2018). This sample size could have impacted the data analysis as other variables were missing when analysing low and high quintile schools. A bigger sample size could have been obtained if other faculties were constantly encouraged to participate and if timing of the survey was appropriate. Nonetheless, the sample was enough to ensure normal distribution of data.

Secondly, the home orientation acculturation construct was slightly over ± 1 ($-1.43 = \text{Kurtosis}$). This may be a threat to normality but as indicated by Cohen (1988) kurtosis can be between -4 and 4 . That is, normality of the research data was assumed. However, the distribution of data did not provide a normal bell-shaped curve but a platykurtic curve. Thirdly, the scale of measurements was also a limitation. The acculturation scale (home and university orientation) was shorter than most scales. It may not have provided a full representation of what was intended to measure from face value. In the future, a lengthy version can be considered to ensure that the construct is fully explored. However, the scale was found reliable, therefore it might not have been a threat to the current study (Person & Lumpkin, 2011). The items in this scale also did not consider certain life occurrences such as geographical change. The participants were asked to "take home to mean the place where you grew up". This did not take into consideration students whose home is no longer the place where they grew up. The items in the scale were also not specific on which reference group was meant by "students at Wits" and this might have created a possible bias response. The students could have referenced their

friends, who might be similar to them as “students at Wits” or their classmates who might not be similar to them in language, food and other constructs measured.

Furthermore, the construct used to measure academic performance poses as a threat. The scale reliability and validity are questionable as there were only four items to measure academic performance namely; English proficiency, highest and lowest mark self-reporting, overall academic performance self-rating and happiness at the university. This scale also had self-reporting items, posing a threat to internal validity based on social desirability. Students may have under or over reported their academic performance and provided bias responses. Nevertheless, although this is a possibility, it is highly doubtful as participants were promised confidentiality and anonymity.

The fourth methodology limitation was the duration of the study. This was a cross sectional study, meaning it was undertaken over a short period of time and participants tested once (Burns & Burns, 2008). This type of research may hinder further inferences made from the changes that may happen in the context, over time. In the future, a longitudinal study can be beneficial in determining other variables that influence students’ acculturation and adaptation to university. Additionally, to determine student acculturation and adaptation to university development over time.

The fifth limitation included demographic statistics. Majority of the participants resided on the university campus. This may have had possible impact on the results obtained. Students that reside on campus residence are given the opportunity to attend first year student orientation prior to the commencement of classes. The purpose is to assist them acculturate effectively and explore university life as mentioned earlier. The intervention may have acted as a mediator. This may have influenced the responses provided by the respondents and inevitably manipulating the results. Regardless of its limitations, the current study acts as a starting point. Other studies may learn from these limitations and can effectively explore the following fields; school background, acculturation, academic performance and adaptation to university with less limitations.

5.8 Future research recommendations

The majority of the results from this study were expected and are supported by relevant existing literature. However, the interrelations between school background and adaptation to university had inverse results. The above insignificant results were unexpected and with no supporting literature. The literature available was that of significant association between the two variables.

There was also few literature that specifically addressed school background and adaptation to university through the lens of SACQ. Although possible reasons for the results were provided above, future empirical research will need to be conducted to better understand the nature of the relationship between school background and adaptation to university. As already mention, there is a possible methodology error and if this is accurate, the study might need to be replicated. If similar results are obtained, then future research will have to explore the reasons why school quintile background does not influence student adaptation at university as expected. Additionally, the context will need to be taken into consideration, preferably the university of the Witwatersrand as different context might impact the findings.

Future studies may also consider exploring the significance of first year orientation programmes and the role they play in assisting students to better acculturate and adapt to the university. To also create a better understanding of the perceptions of students on how they think school background has shaped their acculturation orientation, academic performance and adaptation to university, a qualitative research approach is recommended.

CHAPTER 6: CONCLUSION

6.1 Conclusion drawn from the research study

This study accomplished its main objective which was to investigate the association between school background and acculturation strategy and the influence they both have on academic performance and adaptation to university. The overarching aim was to understand academic failure and its association with the education delivered by schools in low-economic communities. The results of this study indicated that academic failure is associated with low quintile school background and marginalisation orientation. Results indicated that school background have an influence on acculturation strategy, academic performance and adaptation to university but did not support the influence of school background on student adaptation to university.

The results specifically indicated that students from low quintile school background are more inclined to marginalisation orientation. Whereas students from high quintile school background are more inclined to integration orientation. Separation orientation and assimilation orientation were not significant. Acculturation orientation influence on academic performance and adaptation to university was found significant. This was supported by relevant literature indicating that integration orientation students tend to be more socially adjusted compared to students in other acculturation strategies. They further reported better English language proficiency compared to students in other acculturation strategies. Integration orientation was indicated as the most prevalent strategy and accompanied by positive outcomes. High quintile school background was associated with integration orientation and high levels of English language proficiency whereas low quintile school background was associated with marginalisation orientation and low levels of English language proficiency.

As anticipated, results also indicated that school background has an influence on student academic performance. This is highly expected because there is already intense research on construct. However, only the English language proficiency construct is related to school background. This suggests that high quintile school background have better English proficiency than low quintile school background students. As previously mentioned, it is recommended that in future research must make use of a full academic performance scale for more specific, in-depth outcome.

6.2 Contributions of the study

This study contributes theoretically and practically to both fields of, education and psychology. Theoretically, the study has contributed to literature on school background and its influence on acculturation strategy, academic performance and adaptation to university. In as far as theoretically established, no research has been conducted on the interaction of all the variables under study. Therefore, the current study contributed towards an existing gap in the field of study. Practically, the current study serves as a starting point for in-depth and specific acculturation intervention development in higher education institutions. it is crucial for the department of education to create strategies to accomplish healthy acculturation and adaptation to university for both students from low quintile school and high quintile school background in order to influence academic performance. This will create students that grow into adults that are able to adjust in any environment they find themselves.

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APPENDICES

Appendix A: Letter to the register



Psychology

School of Human & Community
Development

University of the Witwatersrand

Private Bag 3, Wits, 2050

Tel: 011 717 4503 Fax: 011 717 4559



Letter to the registrar

Dear Ms Nicoleen,

I am Carlista Mosenene, I am currently completing my postgraduate master's degree in industrial psychology at the University of the Witwatersrand and I am conducting research regarding students' acculturation strategy and how this influence their adaptation to the university as well as their academic performance. Research suggests that students who integrate into university context perform academically better compared to those that fail to integrate. My research aims to establish whether this is the case for Wits students. If so, it suggests an approach that may reduce student dropout and improve academic performance of the University.

As part of data collection, this research project requires completion of an online questionnaire which should take approximately 30 minutes to complete. Participation of students is valuable to this study as it will contribute to knowledge of how students adapt to the university and potentially develop policies to help student adjustment in order to improve their academic performance. I therefore kindly ask that I have access to the emails of all first-year students so I can send through the questionnaire.

The ideal sample should be a minimum of 300 students, the study will require voluntary participation from students. They will be made fully aware that they can withdraw from the study should they feel uncomfortable to proceed up until the point of submission. My contact details and address for the Career and Counselling Development Unit (CCDU) on campus, will be included on the last page. Should the participants require professional support. This is to ensure that the psychological well-being of the participant is of first priority (American Psychological Association).

I look forward to a positive response.

Thank you.

Kind Regards,

Carlita Mosenene

1505596

mosenenecarlita@gmail.com

Professor G. Finchilescu (Supervisor)

gillian.finchilescu@wits.ac.za

Appendix B: Letter to the students



Psychology

School of Human & Community
Development

University of the Witwatersrand

Private Bag 3, Wits, 2050

Tel: 011 717 4503 Fax: 011 717 4559



Dear Student,

I am currently completing my postgraduate master's degree in psychology at the University of the Witwatersrand and I am conducting research concerning first year students' adaptation to the university context. Part of this research requires completion of an online questionnaire which should take approximately 30 minutes to complete. We understand that this is a substantial investment of your time. However, your response is valuable as it will contribute to knowledge of how students adapt to the university context. I would therefore like to invite you to participate in this research.

Anonymity of your responses will be guaranteed and will remain confidential. All data will be coded in a de-identified manner and subsequently analysed and reported in such a way that responses cannot be linked to any individual. Should you choose not to participate, this will not be held against you in any way. As we will only focus on group trends, and have no way of linking any individual's identity to a particular questionnaire, we will not be able to give you individual feedback.

Should you feel upset by the questions in anyway, please call the Counselling and Careers Development Unit (CCDU) number provided below. You may email me approximately three months after completion of this questionnaire should you require general feedback on the results of this study. If you have any further questions or wish to discuss your participation, please feel free to contact me or my supervisor; our details are provided below.

Thank you for considering taking part in the research project.

CCDU 0117179140/32

Carlista Mosenene

mosenenecarlista@gmail.com

Professor G. Finchilescu (Supervisor)

gillian.finchilescu@wits.ac.za

Please complete the link below

<https://www.surveymonkey.com/r/carlista>

Appendix C: The adapted Acculturation Strategies scale

Please read each of the following statements and rate them according to how accurately they describe your attitudes and beliefs. Please respond honestly and answer every question according to the rating scale. 1-Strongly Agree.2- Agree.3- Somewhat Agree.4- Neutral.5- Somewhat Disagree.6- Disagree. 7- Strongly Disagree.

In the questions below, please take home to mean the place where you grew up.

1. Consider the language you speak most often, is this language used by the people in your home community?

Strongly Agree	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr></table>	1	2	3	4	5	6	7	Strongly Disagree
1	2	3	4	5	6	7			

2. Consider the music you listen to, is this music most similar to the one listened by the people in your home community?

Strongly Agree	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr></table>	1	2	3	4	5	6	7	Strongly Disagree
1	2	3	4	5	6	7			

3. Consider the food you like to eat, are these foods most similar to those liked by people in your home community?

Strongly Agree	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr></table>	1	2	3	4	5	6	7	Strongly Disagree
1	2	3	4	5	6	7			

4. Consider the values that you personally have, are these most similar to the people in your home community?

Strongly Agree	<table border="1"><tr><td>1</td><td>2</td><td>3</td><td>4</td><td>5</td><td>6</td><td>7</td></tr></table>	1	2	3	4	5	6	7	Strongly Disagree
1	2	3	4	5	6	7			

5. Consider the language you most use, is this language most similar to the one used by the students at Wits?

Strongly
Agree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Strongly
Disagree

6. Consider the music you listen to, is this music most similar to the one listened by other Wits students?

Strongly
Agree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Strongly
Disagree

7. Consider the food you like to eat, are these foods most similar to those liked by other students at wits?

Strongly
Agree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Strongly
Disagree

8. Consider the values that you personally have, are these most similar to the other students at Wits?

Strongly
Agree

1	2	3	4	5	6	7
---	---	---	---	---	---	---

Strongly
Disagree

Appendix D: Demographic Questionnaire

Please provide us with the following information by filling in the required information or placing an X in the appropriate box. Please answer all the questions

1. What is your gender?

Male	Female	Other
------	--------	-------

2. How old are you? _____ (years)

3. At which school/college did you complete your NSC or other matriculation?

4. Was this school mixed gender?

Yes	No
-----	----

5. Was this school mixed race?

Yes	No
-----	----

6. What was the main language of instruction at this school?

Afrikaans	English	IsiZulu	IsiXhosa
siSwati	Sesotho	Setswana	Xitsonga
Sesotho sa Leboa	Tshivenda	IsiNdebele	Other

7. What was the main language spoken by learners in the playground?

Afrikaans	English	IsiZulu	IsiXhosa
siSwati	Sesotho	Setswana	Xitsonga
Sesotho sa Leboa	Tshivenda	IsiNdebele	Other

8. Approximately how many learners were in your class?

9. Did your school teach you how to use computers?

Yes	No
-----	----

10. Did your school have sports facilities?

Yes	No
-----	----

11. What is your nationality?

South African	Other
---------------	-------

(If other, please specify what country you originate from)

11. What is your main residence while at university? (If other, please specify)

Family home	University accommodation	Non-university accommodation	Own home	Other
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12. What is your home language?

Afrikaans	English	IsiZulu	IsiXhosa
siSwati	Sesotho	Setswana	Xitsonga
Sesotho sa Leboa	Tshivenda	IsiNdebele	Other

(If other, please specify) _____

13. How proficient are you in English? (Please rate)

Bad	Not Good	Good	Very good	Excellent
-----	----------	------	-----------	-----------

14. What would you describe as your ethnic origin?

Black- African	Coloured	White	Indian/Asian
Chinese	Other		

15. Are you involved in any community organisation or club outside the university? (If so, please specify) _____

16. Are you involved in any organisation or club at Wits?

(If so, please specify) _____

17. What was your highest and lowest June exam mark?

18. Please rate your previous 6 months academic performance.

Bad	Slightly bad	Slightly good	Good	Very good	Excellent
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19. Please rate how happy you are at University.

Not happy	Slightly happy	Happy	Very Happy
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Appendix E: The modified Adaptation to University Measure Questionnaire

The Student Adaptation to College Questionnaire (SACQ) is a self-report instrument with the intention to measure students' adjustment to University. It contains 67 items measuring four dimensions on a 9 point scale ranging from 1 implying 'applies to me' while 9 implies 'does not apply to me at all'. The four dimensions that this scales measure include, the Academic Adjustment measuring motive and academic performance. The second dimension includes Social Adjustment measuring involvement and relationships. The third dimension is the Personal-Emotional Adjustment measuring wellbeing in all aspects. The last dimension is Attachment measuring satisfaction and feelings about University.

Questions from the SACQ scale cannot be presented in the appendix however as the scale is commercial and standardised (under copyright).

Student number

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Final submission of the questionnaire will be considered as consent.

Click

SUBMIT

Appendix C: Tables of results

1. Correlation between the variables table

	English proficiency	Highest%	Lowest%	Self-rating of performance	Academic adjustment	Personal-Emotional adjustment	Social-Adjustment	Attachment to institution	Full adjustment scale	Happy
English proficiency	1	.291**	.308**	.291**	.171**	0.109	.203**	0.066	.175**	0.084
Lowest%	.308**	.593**	1	.613**	.344**	.241**	.198**	.155**	.313**	.170**
Self-rating of performance	.291**	.628**	.613**	1	.538**	.279**	.281**	.254**	.445**	.331**
Academic adjustment	.171**	.375**	.344**	.538**	1	.542**	.537**	.638**	.863**	.547**
Personal-Emotional adjustment	0.109	.246**	.241**	.279**	.542**	1	.516**	.406**	.783**	.455**
Social-Adjustment	.203**	.235**	.198**	.281**	.537**	.516**	1	.780**	.817**	.615**
Attachment to institution	0.066	.178**	.155**	.254**	.638**	.406**	.780**	1	.798**	.650**
Full adjustment scale	.175**	.340**	.313**	.445**	.863**	.783**	.817**	.798**	1	.670**
Happy	0.084	.246**	.170**	.331**	.547**	.455**	.615**	.650**	.670**	1

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

2. Tests of Between-Subjects Effects table

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Highest%	582.517a	3	194.172	1.911	.128	.019
	Lowest%	180.755b	3	60.252	.424	.736	.004
	Ratg perf	26.020c	3	8.673	2.688	.047	.026
	English prof	16.567d	3	5.522	8.306	.000	.077
Intercept	Highest%	1356038.885	1	1356038.885	13349.153	.000	.978
	Lowest%	760413.682	1	760413.682	5353.553	.000	.947
	Ratg perf	7466.621	1	7466.621	2314.102	.000	.886
	English prof	4480.648	1	4480.648	6738.911	.000	.958
Orient	Highest%	582.517	3	194.172	1.911	.128	.019
	Lowest%	180.755	3	60.252	.424	.736	.004
	Ratg perf	26.020	3	8.673	2.688	.047	.026
	English prof	16.567	3	5.522	8.306	.000	.077
Error	Highest%	30169.970	297	101.582			
	Lowest%	42185.604	297	142.039			
	Ratg perf	958.293	297	3.227			
	English prof	197.473	297	.665			
Total	Highest%	1524049.500	301				
	Lowest%	875098.000	301				
	Ratg perf	9278.000	301				
	English prof	5167.000	301				
Corrected Total	Highest%	30752.487	300				
	Lowest%	42366.359	300				
	Ratg perf	984.312	300				
	English prof	214.040	300				

a. R Squared = .019 (Adjusted R Squared = .009)

b. R Squared = .004 (Adjusted R Squared = -.006)

c. R Squared = .026 (Adjusted R Squared = .017)

d. R Squared = .077 (Adjusted R Squared = .068)

3. Multiple Comparisons information table

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Rating performance	LSD	Integration	Assimilation	.70*	0.303	0.021	0.11	1.30
			Separation	0.22	0.301	0.465	-0.37	0.81
			Marginalisation	.60*	0.259	0.021	0.09	1.11
		Assimilation	Integration	-.70*	0.303	0.021	-1.30	-0.11
			Separation	-0.48	0.347	0.165	-1.17	0.20
			Marginalisation	-0.10	0.312	0.744	-0.72	0.51
		Separation	Integration	-0.22	0.301	0.465	-0.81	0.37
			Assimilation	0.48	0.347	0.165	-0.20	1.17
			Marginalisation	0.38	0.310	0.219	-0.23	0.99
		Marginalisation	Integration	-.60*	0.259	0.021	-1.11	-0.09
			Assimilation	0.10	0.312	0.744	-0.51	0.72
			Separation	-0.38	0.310	0.219	-0.99	0.23
English proficiency	LSD	Integration	Assimilation	.52*	0.137	0.000	0.25	0.79
			Separation	0.05	0.137	0.690	-0.21	0.32
			Marginalisation	.46*	0.117	0.000	0.23	0.69
		Assimilation	Integration	-.52*	0.137	0.000	-0.79	-0.25

			Separation	-.47*	0.158	0.003	-0.78	-0.16
			Marginalisation	-0.06	0.141	0.683	-0.34	0.22
		Separation	Integration	-0.05	0.137	0.690	-0.32	0.21
			Assimilation	.47*	0.158	0.003	0.16	0.78
			Marginalisation	.41*	0.141	0.004	0.13	0.69
		Marginalisation	Integration	-.46*	0.117	0.000	-0.69	-0.23
			Assimilation	0.06	0.141	0.683	-0.22	0.34
			Separation	-.41*	0.141	0.004	-0.69	0.00

4. Tests of Between-Subjects Effects table

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared
Corrected Model	Happy	4.581a	3	1.527	2.389	.069	.023
	Academic adjustment	10.147b	3	3.382	2.506	.059	.025
	Personal-Emotional adjustment	10.326c	3	3.442	1.490	.217	.015
	Social-Adjustment	13.110d	3	4.370	2.691	.046	.026
	Attachment to institution	11.806e	3	3.935	2.081	.103	.020
	Full adjustment scale	9.357f	3	3.119	2.718	.045	.027
Intercept	Happy	1735.863	1	1735.863	2715.295	.000	.901
	Academic adjustment	8685.505	1	8685.505	6434.369	.000	.956
	Personal-Emotional adjustment	6264.154	1	6264.154	2711.854	.000	.901
	Social-Adjustment	7875.438	1	7875.438	4850.290	.000	.942
	Attachment to institution	11537.594	1	11537.594	6101.045	.000	.953
	Full adjustment scale	8289.285	1	8289.285	7223.351	.000	.960
Orientation	Happy	4.581	3	1.527	2.389	.069	.023
	Academic adjustment	10.147	3	3.382	2.506	.059	.025

	Personal-Emotional adjustment	10.326	3	3.442	1.490	.217	.015
	Social-Adjustment	13.110	3	4.370	2.691	.046	.026
	Attachment to institution	11.806	3	3.935	2.081	.103	.020
	Full adjustment scale	9.357	3	3.119	2.718	.045	.027
Error	Happy	191.148	299	.639			
	Academic adjustment	403.608	299	1.350			
	Personal-Emotional adjustment	690.665	299	2.310			
	Social-Adjustment	485.488	299	1.624			
	Attachment to institution	565.434	299	1.891			
	Full adjustment scale	343.123	299	1.148			
Total	Happy	2102.000	303				
	Academic adjustment	9966.352	303				
	Personal-Emotional adjustment	7595.978	303				
	Social-Adjustment	9109.628	303				
	Attachment to institution	13128.033	303				
	Full adjustment scale	9444.566	303				
Corrected Total	Happy	195.729	302				
	Academic adjustment	413.756	302				

	Personal-Emotional adjustment	700.990	302				
	Social-Adjustment	498.598	302				
	Attachment to institution	577.241	302				
	Full adjustment scale	352.480	302				

a. R Squared = .023 (Adjusted R Squared = .014)

b. R Squared = .025 (Adjusted R Squared = .015)

c. R Squared = .015 (Adjusted R Squared = .005)

d. R Squared = .026 (Adjusted R Squared = .017)

e. R Squared = .020 (Adjusted R Squared = .011)

f. R Squared = .027 (Adjusted R Squared = .017)

5. Multiple Comparisons information table

Dependent Variable				Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
							Lower Bound	Upper Bound
Happy	LSD	Integration	Assimilation	.28*	0.133	0.035	0.02	0.54
			Separation	0.14	0.133	0.308	-0.13	0.40

		Assimilation	Marginalisation	.27*	0.115	0.020	0.04	0.50
			Integration	-.28*	0.133	0.035	-0.54	-0.02
			Separation	-0.15	0.152	0.341	-0.45	0.15
			Marginalisation	-0.01	0.137	0.934	-0.28	0.26
		Separation	Integration	-0.14	0.133	0.308	-0.40	0.13
			Assimilation	0.15	0.152	0.341	-0.15	0.45
			Marginalisation	0.13	0.137	0.329	-0.14	0.40
		Marginalisation	Integration	-.27*	0.115	0.020	-0.50	-0.04
			Assimilation	0.01	0.137	0.934	-0.26	0.28
			Separation	-0.13	0.137	0.329	-0.40	0.14
Academic Adjustment	LSD	Integration	Assimilation	.4171*	0.19371	0.032	0.0359	0.7983
			Separation	.4100*	0.19371	0.035	0.0288	0.7912
			Marginalisation	.3389*	0.16777	0.044	0.0087	0.6691
		Assimilation	Integration	-.4171*	0.19371	0.032	-0.7983	-0.0359
			Separation	-0.0071	0.22155	0.974	-0.4431	0.4289
			Marginalisation	-0.0782	0.19927	0.695	-0.4704	0.3139
		Separation	Integration	-.4100*	0.19371	0.035	-0.7912	-0.0288
			Assimilation	0.0071	0.22155	0.974	-0.4289	0.4431
			Marginalisation	-0.0711	0.19927	0.721	-0.4633	0.3211
		Marginalisation	Integration	-.3389*	0.16777	0.044	-0.6691	-0.0087
			Assimilation	0.0782	0.19927	0.695	-0.3139	0.4704

			Separation	0.0711	0.19927	0.721	-0.3211	0.4633
Social Adjustment	LSD	Integration	Assimilation	.4510*	0.21245	0.035	0.0329	0.8691
			Separation	0.2016	0.21245	0.344	-0.2165	0.6197
			Marginalisation	.4691*	0.18400	0.011	0.1070	0.8312
		Assimilation	Integration	-.4510*	0.21245	0.035	-0.8691	-0.0329
			Separation	-0.2494	0.24299	0.306	-0.7276	0.2288
			Marginalisation	0.0181	0.21855	0.934	-0.4120	0.4482
		Separation	Integration	-0.2016	0.21245	0.344	-0.6197	0.2165
			Assimilation	0.2494	0.24299	0.306	-0.2288	0.7276
			Marginalisation	0.2675	0.21855	0.222	-0.1626	0.6976
		Marginalisation	Integration	-.4691*	0.18400	0.011	-0.8312	-0.1070
			Assimilation	-0.0181	0.21855	0.934	-0.4482	0.4120
			Separation	-0.2675	0.21855	0.222	-0.6976	0.1626
Full Adjustment scale	LSD	Integration	Assimilation	.4055*	0.17860	0.024	0.0540	0.7569
			Separation	0.3191	0.17860	0.075	-0.0324	0.6705
			Marginalisation	.3706*	0.15469	0.017	0.0661	0.6750
		Assimilation	Integration	-.4055*	0.17860	0.024	-0.7569	-0.0540
			Separation	-0.0864	0.20428	0.673	-0.4884	0.3156
			Marginalisation	-0.0349	0.18374	0.849	-0.3965	0.3267
		Separation	Integration	-0.3191	0.17860	0.075	-0.6705	0.0324
			Assimilation	0.0864	0.20428	0.673	-0.3156	0.4884

			Marginalisation	0.0515	0.18374	0.779	-0.3101	0.4131
		Marginalisation	Integration	-.3706*	0.15469	0.017	-0.6750	-0.0661
			Assimilation	0.0349	0.18374	0.849	-0.3267	0.3965
			Separation	-0.0515	0.18374	0.779	-0.4131	0.3101
Based on observed means.								
The error term is Mean Square (Error) = 1.148.								
*. The mean difference is significant at the .05 level.								