

**THE ADJUSTMENT OF FIRST- AND NON-FIRST-GENERATION  
STUDENTS DURING THEIR FIRST YEAR**

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IN THE  
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at the

**UNIVERSITY OF THE FREE STATE**

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**2016**

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## ABSTRACT

This study explored adjustment among students from different generational groups during their first year at university. The specific aim of this research study was to investigate the differences in adjustment between first- and non-first-generation students during their first year at university. Furthermore, the perceptions of students regarding various adjustment issues were explored. A mixed-methods research approach was employed. The sample group consisted of 122 first-year students. In the quantitative section of the study, a biographical questionnaire and the Student Adaptation to College Questionnaire were used to measure the students' levels of adjustment, specifically with regard to aspects of their academic, social, and personal-emotional adjustment. The adjustment levels of first-generation and non-first-generation students were determined, and it was found that both groups portrayed relatively moderate levels of adjustment. Analyses of variance indicate that first-generation students reported significantly higher levels of personal-emotional adjustment than the non-first-generation students did. In the qualitative section of the study, six semi-structured individual interviews were conducted to explore the perceptions students from different generational groups had regarding their adjustment during their first year at university. The themes emerging from both generational groups were very similar. These themes included students' adjustment challenges regarding having to leave their home environment and entering a culturally diverse university environment. Challenges with regard to social adjustment (such as finding a new support system) and academic adjustment (such as struggling with a higher workload, time pressure, and academic expectations) were numerous. In facing these demands, students were prompted to find new ways of coping (such as accepting personal responsibility and finding independence).

*Keywords: academic adjustment, social adjustment, personal-emotional adjustment, first year, first-generation students, non-first-generation students*

## OPSOMMING

Hierdie studie ondersoek aanpassing onder studente van verskillende generasie groepe gedurende hul eerste jaar op universiteit. Die spesifieke doel van hierdie navorsingstudie was om die verskil in aanpassing tussen eerste- en nie-eerstegenerasiestudente gedurende die eerste jaar van universiteit te ondersoek. Verder is die persepsies van studente met betrekking tot verskeie aanpassingskwessies verken. 'n Gemengdemetodes-navorsingsontwerp is gebruik. Die ondersoekgroep het bestaan uit 122 eerste jaar studente. In die kwantitatiewe gedeelte van die studie is 'n biografiese vraelys en die *Student Adaptation to College* vraelys gebruik om die vlakke van aanpassing van die studente te meet, spesifiek met betrekking tot aspekte van hul akademiese, sosiale en persoonlike-emosionele aanpassing. Die aanpassingsvlakke van die eerstegenerasie- en nie-eerstegenerasiestudente is bepaal, en dit is bevind dat beide groepe relatiewe matige vlakke van aanpassing getoon het. Variansie-analise het aangedui dat eerstegenerasiestudente aansienlike hoër vlakke van persoonlike-emosionele aanpassing as nie-eerstegenerasiestudente getoon het. In die kwalitatiewe gedeelte van die studie is ses semi-gestruktureerde individuele onderhoude gevoer om die verskillende persepsies wat studente van verskillende generasie groepe met betrekking tot aanpassing tydens hulle eerste jaar op universiteit gehad het, te ondersoek. Die temas van beide generasiegroepe wat na vore gekom het, was soortgelyk. Hierdie temas sluit die uitdagings wat studente ervaar het met betrekking tot die verlating van hul tuisomgewing asook die kulturele diverse omgewing wat universiteit hul nou bied, in. Daar was talle uitdagings rakende sosiale aanpassing (om 'n nuwe ondersteuningstelsel te vind) en akademiese aanpassing (om te sukkel met 'n groter werkslading, tydsdruk, en akademiese verwagtinge). Deur hierdie uitdagings aan te pak, was studente aangemoedig om nuwe maniere van hantering te vind (om persoonlike verantwoordelikheid te neem en om onafhanklikheid te vind).

*Sleutelwoorde: akademiese aanpassing, sosiale aanpassing, persoonlike-emosionele aanpassing, eerste jaar, eerstegenerasiestudente, nie-eerstegenerasiestudente*

## **CHAPTER 1: OUTLINE OF THE RESEARCH STUDY**

Higher education in South Africa is aimed at producing well-adjusted graduates who are able to contribute to a developing society. The first year of higher education is a dynamic and transitional time when students are expected to adjust to a variety of new challenges and situations. Students are expected to adjust not only to new academic demands, but also to a variety of social and personal challenges. Especially, the growing body of first-generation students is faced with a myriad of adjustments, as they are the first in their family to attend a higher education institution. Therefore, the aim of this research study was to investigate the differences in adjustment between first- and non-first-generation students during their first year at university. Furthermore, the perceptions of students regarding various adjustment issues were investigated.

In this chapter, a general overview of the different aspects of the research study is provided. The context and rationale of the study are discussed, as well as the theoretical perspectives underpinning the study. A brief overview of the research design and methods is included in this chapter. Furthermore, a delineation of the chapters is provided.

### **1.1 Context and Rationale of the Research Study**

As a developing nation, South Africa needs graduates of a high quality to contribute to all forms of development in the country (Council of Higher Education, 2013; Jones, Coetzee, Bailey, & Wickham, 2008). Higher education institutions in South Africa are faced with high dropout and failure rates (Council of Higher Education, 2013; Van Schalkwyk, 2008). According to Letseka and Maile (2008), South Africa has one of the lowest graduation rates in the world. The Council of Higher Education (2013) states that only one in four students graduate in the prescribed time. Furthermore, according to Letseka and Maile (2008), especially first-year students are at risk for dropping out of university before the end of their first year. These statistics are a cause for concern regarding the success of students in the higher education environment. According to Strydom, Kuh, and Mentz (2010), one of the key challenges in South Africa's higher education system is student success.

An institution of higher education offers various challenges, as well as rewarding and stimulating experiences for students (Abdullah, Elias, Mahyuddin, & Uli, 2009). During the transition to this new environment, students will be exposed to a wide range of adjustment

issues, challenges, and stressors (Abdullah et al., 2009; Beyers & Goossens, 2002). These adjustment issues typically include forming new relationships (Barry, Hudley, Kelly, & Cho, 2009), attaining a sense of independence, and responsibility (Barry et al., 2009; Pittman & Richmond, 2008), managing financial pressures (Mudhovozi, 2011), and having to adjust to the new academic environment and academic demands the university has to offer (Al-Qaisy, 2010; Mudhovozi, 2012). Students find it difficult to adjust to all the challenges that are associated with the new environment higher education institutions offer. Jones et al. (2008) state that most of the students arriving at university are from areas with a culture and language different from the urban culture and environment university life offers. It is expected of students to adjust to the academic level of university and the culture of university life within in a short period (Sommer, 2013).

Successful adaptation to university requires of individuals to develop gradually in social and emotional areas (Abdullah et al., 2009), and to cope with academic problems (Beyers & Goossens, 2002). For students to demonstrate that they have adjusted, progressed, and grown (Evans, Forney, Guido, Patton, & Renn, 2009), they need to gain a wide-ranging set of social competencies and life skills (Jenney, 2011). Thus, the transition to university can be seen as a very challenging experience that entails dynamic adjustments (Brook, Fergie, Maeorg, & Michell, 2014).

The first year at university is especially important in the overall adjustment of students at university (Feldman, 2005). According to Wittenberg and Clinic (2001), the changes students undergo when entering university during their first year can be either positive or negative for their development. The first year of university offers a new environment that is considered very different from students' high school environment. When students enter university, they are confronted with difficult academic tasks, and they are expected to possess a wide range of skills (reasoning skills, judgement skills, and communication skills) and to be able to function independently in the new environment (Fitzgerald, 2004).

Currently in South Africa, a large number of students entering university are first-generation students who show great risk of not graduating from university (Strydom et al., 2010). During the past decade, the number of first-generation students (students whose parents did not attend a higher education institution) enrolling for higher education studies has increased dramatically (Gibbons, 2005; McCarron & Inkelas, 2006; Strydom et al., 2010). Fiebig, Braid, Ross, Tom, and Prinzo (2010) found that first-generation students are prone to struggle to attune to the new

environment that university life offers. According to McCarron and Inkelas (2006), the adjustment capacities of first-generation students differ from those of non-first-generation students. A possible reason may be that adjustment of non-first-generation students is facilitated by valuable familial support and effective preparation for a new environment (McCarron & Inkelas, 2006). Since first-generation students' parents did not attend a higher education institution, they do not have access to the framework of university life (Gibbons, 2005; McCarron & Inkelas, 2006; Strydom et al., 2010). Owing to the lack of personal experiences (of parents) and inadequate encouragement, first-generation students experience particular challenges (Barry et al., 2009). The lack of parental guidance throughout the first year at university could influence first generation students' experience and general adjustment at university.

Most studies directed at adjustment of university students focus on adjustment differences between genders (Abdullah et al., 2009; Al-Qaisy, 2010; Machado, Almeida, & Soares, 2002) or the adjustment of international students at a South African university (Mudhovozi, 2011). Fewer studies have incorporated the effect of generational status on adjustment (Hertel, 2002). Therefore, the aim of this research study was to investigate the differences in adjustment between first- and non-first-generation students during their first year a university in a South African context. Furthermore, students' perceptions regarding various adjustment issues were also explored.

## **1.2 Theoretical Perspectives Underpinning the Study**

According to the life-span development approach, individuals' entire life span is a process of growth and adjustment (Sugarman, 2004). In the present study, student development and adjustment were considered from a life-span development perspective. Student development, the tasks and changes emerging adults encounter during their time at university, entails changes in the cognitive and psychosocial domain. These changes include aspects of academic and career development, as well as identity development and interpersonal growth (Altbach, Arnold, & King, 2014; Ender & Newton, 2000; Jones & Abes, 2013; Patton et al., 2016).

Adjustment, in the setting of a higher education institution, can be understood when considering how students understand academic and personal challenges and expectations, and how students create meaning from their environments (Baxter Magolda, 2007; Baxter Magolda, 2012; Wilson & Wolf-Wendel, 2005). Cognitive development theories such as the

work of Perry (1981) and Baxter Magolda (2012) were utilised in this study to consider how students make sense of their situations and environments (Baxter Magolda, 1992), as well as their ways of knowing. In addition to their cognitive development, the psychosocial development of students also relates to their adjustment to the university environment. Chickering explains how the higher education environment can facilitate students' development through various vectors, including emotional, ethical, interpersonal, and intellectual facets of development (Chickering, McDowell, & Campagna, 1969; Patton et al., 2016).

Student adjustment also entails the interaction of students with their new environment (Tinto, 2007). Various theorists, such as Tinto (1975; 2007), Astin (1984), Pascarella and Terenzini (1976, 1977, 1979, 1983), Kuh, Kinzie, Schuh, and Whitt (2011), Jama, Mapasela, and Beylefeld (2008) considered the multifaceted nature of the interaction between students and the higher education environment. To conceptualise student adjustment in the present study, Baker and Siryk's (1984, 1986, 1989) theory regarding student adjustment was utilised. Baker and Siryk (1986, 1989) point out that university adjustment consists of four aspects, namely academic adjustment, social adjustment, personal-emotional adjustment, and attachment. According to Baker and Siryk (1989), academic adjustment indicates the extent to which students cope with the academic challenges and demands of university. Social adjustment can be described as the different social and interpersonal circumstances, and the way students utilise them. Furthermore, personal-emotional adjustment relates to the physical or psychological anxiety students may experience in the university environment. The last aspect of adjustment, attachment, can be understood as students' feeling of commitment and belonging to their university of choice (Baker & Siryk, 1989).

### **1.3 Overview of the Research Design and Methods**

The aim of this study was to investigate the differences in adjustment between first- and non-first-generation students during their first year at university. The following research questions were investigated:

1. Are there significant differences in adjustment between students from different generational groups during their first year?
2. What perceptions do students from different generational groups have regarding their adjustment during their first year?

A mixed-methods research approach was followed. The use of both quantitative and qualitative approaches provided a broader and deeper perspective to the study than using only one of the two methods would have provided (Onwuegbuzie & Leech, 2005).

Participating students included in the study were in their first year of study at the University of the Free State (UFS). A sample of 122 first-year students was recruited by means of convenience sampling for the quantitative section of the study. For the qualitative part of the study, six participants were purposively selected based on their generational status.

To gather data for the quantitative section of the study, a biographical questionnaire (to determine students' age, gender, ethnic group, year group, and generation status) and the *Student Adaptation to College Questionnaire (SACQ)* (Baker & Siryk, 1989) were administered. The SACQ is a self-report questionnaire that is used to measure students' overall adjustment and their adjustment related to four subscales, namely academic adjustment, social adjustment, personal-emotional adjustment, and attachment. For the qualitative part of the study, six semi-structured individual interviews were held. These interviews allowed the researcher to explore the perceptions of first-generation and non-first-generation students regarding various aspects of adjustment.

The quantitative data collected by means of the questionnaires were used to report on the adjustment levels of first-generation and non-first-generation students. The reliability of the measure for this specific sample was determined by means of Cronbach's alpha coefficient. Furthermore, descriptive statistics were used to describe the manifestation of adjustment in the sample and inferential statistics (multivariate analysis of variance: MANOVA) to determine the difference in adjustment between students from different generational groups. For the qualitative section of the study, thematic analysis was used to identify the themes that emerged during the individual interviews.

During this study, a variety of ethical issues was considered. Authorisation to conduct the study was gained from the Dean of Students, the Research Committee of the Department of Psychology, and the Research Ethics Committee of the Faculty of the Humanities at the UFS. Informed consent was gained from participants for both the quantitative and qualitative sections of the research. The voluntary and confidential nature of the study was respected throughout the process. Trustworthiness was ensured by considering dependability, confirmability, credibility, and transferability.

## **1.4 Delineation of Chapters**

In Chapter 2, an overview of student development is provided. Student development is conceptualised by investigating life-span development and the period of emerging adulthood. The cognitive development of students is discussed in terms of the theories of Piaget (2001), Vygotsky (1978), Perry (1981), Baxter Magolda (1992, 2007, 2012), and King and Kitchener (2004). The theories of Erikson (1980) and Chickering and Reisser (2005) are used to explain the psychosocial development of students. The chapter concludes with an explanation of students' transition into higher education.

Chapter 3 contains a conceptualisation of the construct *adjustment*. Adjustment is discussed by utilising various theories regarding student adjustment. The theories that are considered include those of Tinto (1975, 2007), Astin (1984), Pascarella and Terenzini (1976, 1977, 1979, 1983), Kuh et al. (2011), Jama et al. (2008), and Baker and Siryk (1984, 1986, 1989). Baker and Siryk's (1984) multifaceted view regarding adjustment is outlined by giving an overview of the concepts of academic adjustment, social adjustment, personal adjustment, and attachment. The chapter is concluded by focusing on the variety of adjustment issues during the first year of university.

In Chapter 4, an overview of the rationale and aim of the study and the research questions posed for the current study are provided. The different methods employed for both the quantitative and qualitative sections of the study are discussed, including a description of the sampling techniques, data-collection procedures, data analysis, ethical considerations, and trustworthiness.

The results of this study are presented and discussed in Chapter 5. The quantitative and qualitative results are presented and then discussed in relation to literature and theory in the field.

In Chapter 6, a conclusion of the research study is provided. The limitations of the present study are discussed, and recommendations for future research studies are made.

## **1.5 Chapter Summary**

The aim of this first chapter was to give a general outline of the research study by providing a background and the aim of the study. A brief discussion of the theoretical underpinnings of the study was given. An overview of the methodology and research questions was provided, as well as a delineation of the chapters that follow.

## **CHAPTER 2: STUDENT DEVELOPMENT**

The aim of this chapter is to provide a broad outline of student development. Firstly, life-span development and the period of emerging adulthood are conceptualised. Secondly, student development is discussed by focusing on the domains of cognitive and psychosocial development, as well as how development in these domains enables students to face the challenges of higher education.

### **2.1 Student Development from a Life-span Perspective**

Development is considered as a lifelong process (Fingerman, 2011). Berk (2007) describes human development as a specific field of study that is devoted to the understanding of the constancies and changes throughout the human life span. Clairborne and Drewery (2010) agree and state that human development can be described as the changes that occur progressively over time and effectively promote adaption to the environment. Throughout development, continuous and systematic changes occur (Sigelman & Rider, 2012). Individuals have to adapt to their unique situations to continue development across the different periods in life (Newman & Newman, 2012).

The development changes individuals undergo mostly occur within three domains (namely the physical, cognitive, and psychosocial domain) over various life stages (from conception to death) (Berk, 2007; Sigelman & Rider, 2012). The physical domain of development can be defined as the functioning of individuals' physiological systems and the physical signs of aging (e.g. changes in physical structure, brain functioning, perception, and sensation) that accompany growth (Bornstein, Vandell, & Rook, 2010; Sigelman & Rider, 2012). This domain also includes the necessary physical growth individuals need to function in their environment (Newman & Newman, 2012). Changes in individuals' mental processes, language, perceptions, memory, and problem-solving skills form part of the cognitive domain of human development (Bornstein et al., 2010; Sigelman & Rider, 2012). The psychosocial domain of human development includes growth and change in individuals' emotions, self-esteem, social skills, and temperament (Gordon & Browne, 2013; Newman & Newman, 2012; Sigelman & Rider, 2012). Domain-specific tasks occur throughout the different stages in life, e.g. prenatal, infancy, toddlerhood, early and middle childhood, adolescence, early, and middle and late adulthood.

### **2.1.1 Emerging adulthood as a stage of life**

In recent years, a new life stage called *emerging adulthood*, the period between adolescence and adulthood, received consideration. Arnett (2010) proposed this life stage, since the transition to adulthood has become prolonged over time. Arnett (2000a) states that the emerging adulthood stage, being in the age range from 18 to 25, is very distinct from both adolescence and young adulthood. The five prominent dimensions of emerging adulthood include a) the period of feeling in between, b) the time of identity exploration, c) the age of instability, d) the stage of self-focus, and e) the stage of possibilities (Arnett, 2004; Arnett, 2010; Zorotovich, 2014).

These dimensions are applicable to young individuals who explore the different aspects of emerging adulthood. Emerging adults see themselves as being 'in between', since they are neither adolescents nor adults (Arnett, 2000a). Emerging adulthood is distinguishable clearly from adolescence, since it involves less parental control and choice that is more independent (Arnett, 2015). Emerging adults not only experience a feeling of being in between, but also experience this stage as a time to discover different aspects of their identity. According to Arnett (2004), identity formation usually begins in the adolescent stage, but during the stage of emerging adulthood, it is deepened and intensified. During emerging adulthood, individuals are free to explore different aspects of life, love, and work (Arnett, 2000a). The exploration of identity produces a feeling of instability in emerging adults. Furthermore, Arnett (2004) argues that emerging adults may experience a feeling of instability caused by different complications they may encounter regarding choices and changes in their life structure. Another dimension of emerging adulthood is the stage of self-focus. Arnett (2013) writes that emerging adults experience a stage of self-focus, in which they can focus on their development as individuals. It is very often found that emerging adults are self-focused due to the level of freedom from social roles in which they can explore various life directions (Twenge, 2006). They experience an array of possibilities while exploring different aspects of life and identity that could form part of their life structure. The stage of possibilities experienced by emerging adults is related to their views of the future that is considered optimistic and hopeful (Arnett, 2004).

### **2.1.2 Students as emerging adults**

Most students entering university find themselves in the stage of emerging adulthood. Arnett (2015) argues that one of the reasons why emerging adulthood has become more prominent in life-span development is the fact that more and more individuals attend higher education. According to Johansson and Felten (2014), students see the different dimensions in emerging adulthood as a manner in which they can grow and explore as individuals. Thus students, as emerging adults, experience the dimensions related to emerging adulthood in a specific manner.

Students who enter university for the first time, in their first year, are no longer seen as being adolescent, but rather as individuals approaching adulthood. University students experience the state of feeling in between, since they have more independence than adolescents have, but less responsibility than adults have (Smith & DeFrates-Densch, 2008). Furthermore, Johansson and Felten (2014) state that students have the need to feel safe and at home in their university environment, so that they can learn and grow in this state of feeling in between. Students, as newly independent emerging adults, are exposed to some level of self-responsibility. Benson, Scales, Hawkins, Oesterle, and Hill (2004) write that emerging adults can be successful when they learn to handle the new responsibilities, challenges, and independent decisions associated with their new environment gradually. According to Jones and Abes (2013), the new environment students experience is ideal for forming their individual identities. The university environment requires students to define themselves as individuals, separate from their families, in their new social environment and as individuals who form part of a higher education institution (Altbach et al., 2014). As emerging adults, students also experience the age of instability, since they are faced with certain complications, which often include the changing of residence or study programmes, as well as relationships with romantic partners and friends (Arnett, 2004). The different identity explorations students experience also seems to be a cause of instability for them (Arnett, 2015). As emerging adults, students also experience the age of self-focus, since they have the opportunity to develop as individuals. According to Benson et al. (2004), emerging adults take responsibility for themselves, their choices, values, and beliefs, in a manner that is not selfish toward others or their social responsibilities. Arnett (2014) agrees when he declares that emerging adults are in a stage of self-focus, but not to the extent of selfishness, but rather in terms of focusing on themselves while developing as individuals. Students are free to be focused on themselves, regarding life decisions (Arnett, 2015). Students'

new environment offers new experiences and adjustment issues (Bojuwoye, 2002), where they are free of any responsibilities or obligations to others (Arnett, 2015). Even though students face difficult adjustment situations, they possess hope and a feeling of possibility for a future in which they are successful as adults (Arnett, 2004; Smith & DeFrates-Densch, 2008). They have an open view regarding their lives, since not much has been decided for certain (Carman, 2008). Benson et al. (2004) explain that emerging adults are content with their situation and environment when they develop a positive outlook and adequate levels of self-esteem. Furthermore, Benson et al. (2004) write that emerging adults' experiences lead to the development of cognitive, emotional, and social abilities.

The development of students can be regarded as the manner in which they progress and grow in terms of their developmental capabilities, facilitated by their participation at university (Ender & Newton, 2000). Students develop not only on a psychosocial level, but also on a cognitive level, since they establish a new way of thinking and decision-making (Ender & Newton, 2000). Thus, from a developmental perspective, it is appropriate to consider student development theories along with those of emerging adulthood, to fully understand the developmental tasks confronting students. The stage of emerging adulthood mostly addresses adjustment issues regarding cognitive and psychosocial development. Thus, for the purpose of this study, the student development tasks related to the cognitive and psychosocial domain are discussed next.

## **2.2 Cognitive and Intellectual Development of Students**

Newman and Newman (2012) describe the cognitive domain as the ability for individuals to think, learn, and reason. Cognitive development involves the movement from simple to more complex structures to acquire methods of reasoning that are more complex (Blimling, 2010). Leird, Seifert, Pascarella, Mayhew, and Blaich (2014) state that students should develop on an intellectual level at university, and would then be more prepared to face the intellectual challenges in their lives. The theories of Piaget (2001) and Vygotsky (1978) form the basis of our understanding regarding cognitive development. Furthermore, the theories of Perry (1981), Baxter Magolda (1992, 2007, 2012), and King and Kitchener (2004) relate to cognitive and intellectual development and how it applies to university students. All of these theories are discussed in the following section.

### **2.2.1 Piaget's theory of cognitive development**

Piaget can be considered as one of the most influential theorists in the study of cognitive development (Littlefield-Cook & Cook, 2005). Piaget (2001) writes that every response to the environment can and should be regarded as a process of adjustment or re-adjustment. According to Piaget, individuals should reach a higher level of development to be in balance with the constantly changing environment (Lutz & Huitt, 2004). Piaget's theory shows that a unique interplay exists between individuals' minds, mental schemas, and the environment, in which already known information is used to interpret their current environment and involvements (Littlefield-Cook & Cook, 2005; Lutz & Huitt, 2004). The acquisition of knowledge occurs during certain stages, by means of modification of mental schemas, through the interrelated processes of assimilation and accommodation (Cohen et al., 2013). Assimilation can be understood as the process during which new information from the environment is incorporated into already existing mental schemas (Blake & Pope, 2008; Cohen et al., 2013; Kearns, 2013). The process of accommodation is the adjustment of cognitive structures when new information does not fit into already existing schemas (Blake & Pope, 2008; Kearns, 2013).

Piaget (2001) recognises four stages of cognitive development, which are divided according to age and the developmental tasks that occur, namely the sensorimotor, preoperational, concrete operational, and formal operational stages (see Table 1 for a summary of these stages).

Most university students find themselves in the formal-operational stage of cognitive development (Petrova, 2008). During this stage, the development of abstract thinking occurs (Ojose, 2008). This includes the development of hypothetical reasoning, systematic manipulation of information, challenging of effects, and deducing logical consequences (Cohen et al., 2013; Littlefield-Cook & Cook, 2005). According to Bjorklund and Blasi (2011), it is Piaget's view that an individual who has mastered the stage of formal-operational thought can be classified as a logical and abstract thinker. Students with the ability to use formal-operational thought are in a position where they can approach the higher education learning environment, and the new information it offers, in an abstract and logical manner.

**Table 1***Four Stages of Cognitive Development, According to Piaget*

<b>Stage</b>	<b>Age</b>	<b>Processes involved</b>
Sensorimotor stage	Birth to 2 years of age	Object permanence is a significant milestone.  Crawling, handling, and mobility occurs to obtain knowledge.  Based on physical interactions and experiences.
Pre-operational stage	2 to 7 years of age	Maturation of language, mental representation of activities, memory, and imagination.
Concrete-operational stage	7 to 11 years of age	Integration of knowledge and use thereof to interact with environment.  Can engage in reversible mental operations.
Formal-operational stage	11 years of age to adult	Logical use of symbols related to abstract concepts.  Can formulate hypothesis and think about abstract relationships and concepts.

Note: Assembled from Littlefield-Cook and Cook (2005); Lutz & Huitt (2004); Wood, Smith, and Grossniklaus (2001)

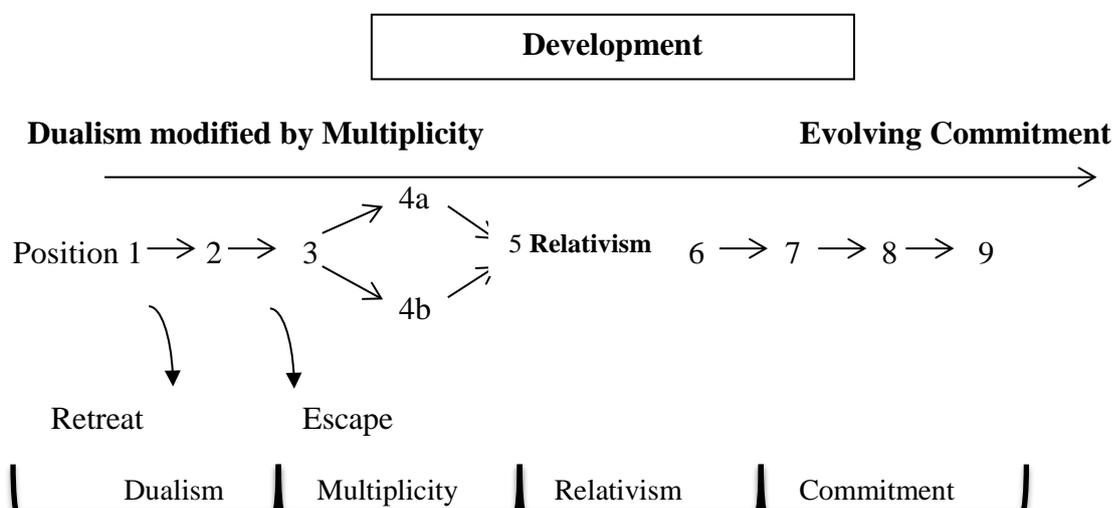
**2.2.2 Vygotsky's theory of cognitive development**

According to Vygotsky, social interaction is the platform for individuals' development and learning (Lutz & Huitt, 2004). His view regarding cognitive development differs slightly from that of Piaget, in that he places greater focus on the critical role of social interaction and language development in cognitive development (Kearns, 2013; Zastrow & Kirst-Ashman, 2009). The social and cultural conditions and environment in which individuals are brought up will influence their development in different ways (Zastrow & Kirst-Ashman, 2009).

Vygotsky’s theory is based mainly on the concept that individuals learn from interactions with peers and adults who are more experienced (Harris & Westermann, 2014). Furthermore, it allows the developing individual to be an active participant in the learning process together with an individual with a higher level of cognitive functioning (Kearns, 2013). According to Vygotsky (1978) and Oakley (2004), the zone of proximal development indicates an individual’s actual level of development along with his or her potential level of development. Learning that occurs within the zone of proximal development cannot be done completely independently, but with assistance from an authority with a higher level of cognitive development (Harrington, 2015). Students begin each higher education learning opportunity from their existing level of knowledge and build upon that by means of learning through social interaction with peers (fellow students and mentors) and authorities (such as tutors and lecturers).

### 2.2.3 Perry’s scheme of intellectual and ethical development

Perry’s theory of intellectual and ethical development (1981) builds on Piaget’s work (O’Neill, 2007) and is focused specifically on the cognitive development of university students (Love & Guthrie, 2011). Students’ ability to challenge contradictory beliefs and values and to utilise conflict situations as a way to grow, is addressed in Perry’s scheme (Stelljes, 2008). Perry (1981) supposes that cognitive development should be regarded as continuous and therefore identifies nine positions that move along a scheme of development (Perry, 1981). The nine positions are grouped into four different stages, namely dualism, multiplicity, relativism, and commitment to relativism (Lyons, 2010) (as shown in Figure 1).



*Figure 1: Perry's map of development (1981, p. 80), Blimling (2010), and West (2004).*

Dualism is the first stage students experience when entering university (Blimling, 2010). Perry (1981) explains dualism as the stage in which individuals divide their worlds into two realms, such as right and wrong. In this stage, individuals view knowledge as absolute, that a right and a wrong answer exist, and that this information should be memorised (Love & Guthrie, 2011; Perry, 1981). Students believe that authorities possess all the right answers, and that the students have to learn from these authorities (Blimling, 2010; Lyons, 2010).

As students experience cognitive dissonance (Stage & Hubbard, 2012), they move into the next stage of multiplicity (Love & Guthrie, 2011). Students begin to understand that not all the information they receive from authorities is absolute (Hinchliffe & Wong, 2012) and that it is acceptable for some aspects of life to be unknown (Blimling, 2010; Perry, 1981). Students realise that multiple perspectives exist in any given situation (Lyons, 2010) and that it is acceptable for people to have their own opinions (Blimling, 2010).

During the third stage of relativism, individuals consider evidence and context when assessing opinions (West, 2004). Students develop a relativistic view to replace their dualistic view (Lyons, 2010). In this stage, students understand that knowledge is influenced by contextual information (Stage & Hubbard, 2012), as well as their values and beliefs (Blimling, 2010).

Commitment in relativity is found when students begin to form commitments to certain views and opinions (Stage & Hubbard, 2012). Students who reach this final stage have established their identities by accepting and committing to their responsibilities (Altbach et al., 2014). This specific way of perceiving knowledge is associated mostly with students during their later years at university (Hinchliffe & Wong, 2012).

#### **2.2.4 Baxter Magolda's model of epistemological development**

Baxter Magolda's model of epistemological development explains the manner in which students move from the belief in authority knowing to a place where they learn how to voice their own views and opinions in different situations (Tynjala, Stenström, & Saarnivaara, 2012). There are similarities between Perry's scheme of intellectual development and Baxter Magolda's model with regard to ways of knowing. However, unlike Perry, Baxter Magolda identifies certain patterns of thinking in every stage of knowing (Merriam, Caffarella, &

Baumgartner, 2012). Baxter Magolda developed four stages of knowing, which consist of unique reasoning methods (West, 2004). These four stages include the stages of absolute knowing, transitional knowing, independent knowing, and contextual knowing (Baxter Magolda, 1992; Love & Guthrie, 2011). Table 3 provides a summary of the model of epistemological development.

**Table 2**

*Model of Epistemological Development, According to Baxter Magolda*

<b>Stages of knowing</b>	<b>Knowledge</b>	<b>Role of students and authorities</b>
Absolute knowing	All knowledge is either right or wrong	Authorities convey the knowledge to students
Transitional knowing	Some knowledge is certain and some is uncertain	Authorities inform the students of the knowledge that is certain.  Students form their own opinions regarding uncertain information.
Independent knowing	Most of the knowledge is known to be uncertain	Students do not rely on authorities, but learn to make their own decisions regarding uncertain information.
Contextual knowing	All knowledge is subject to contextual information	Students learn how to take responsibility for their judgements, opinions, and decisions regarding uncertain information.

Note: Assembled from Tynjala, Stenström, and Saarnivaara (2012) and Felder and Brent (2004).

As shown in Table 2, students will make sense of their environments and situations based on their ways of knowing (Baxter Magolda, 1992). In their first year, many students enter university with the expectation of learning and receiving specific answers, from their authorities, in terms of academics and personal development (Baxter Magolda, 2007; Baxter Magolda, 2012; Wilson & Wolf-Wendel, 2005). These expectations occur in the stage of absolute knowing. This stage is similar to Perry's stage of dualism (Moon, 2007). During this

stage, students believe that, to learn, they must simply absorb all the learning material and remember it (Baxter Magolda, 1992; Moon, 2007).

The next stage is the transitional stage. In this stage, it is likely that some uncertainty may occur regarding knowledge (Baxter Magolda, 1992), but it is still believed that certain areas retain their certainty (Smart & Paulsen, 2011). Students will begin to understand that information should be understood, rather than just learned or remembered (Hamrick, Evans, & Schuh, 2003). Development during university is more than acquiring knowledge from authorities. According to Baxter Magolda (2007), further development includes the alteration of personal views, relations, and knowledge.

In the stage of independent knowing, students accept the fact that there exists a level of uncertainty regarding knowledge, since personal views and opinions influences information (Baxter Magolda, 1992). Students in this stage know that learning includes other people's opinions and independent learning (Altbach et al., 2014). They develop the confidence to accept their own opinions and views (McKeown, 2009). The stages of transitional and independent knowing agree with Perry's stage of multiplicity.

The last stage is contextual knowing. In this stage, students understand the importance of gathering contextual information (Hamrick, Evans, & Schuh, 2003) and that opinions and views can be formed once this information has been gathered (Baxter Magolda, 1992). Smart and Paulsen (2011) state that students now know how to integrate the contextual information with their own views and beliefs to form their own opinions.

### **2.2.5 King and Kitchener's reflective judgement model**

The reflective judgement model was developed to understand the different reasoning patterns of adolescents and adults (King & Kitchener, 2004). It is similar to Perry's scheme, as it explains how students develop their ways of thinking, to support their views and opinions regarding controversial issues (Heywood, 2000). In this reflective judgement model, the seven major stages of the development of reflective thinking are described (King & Kitchener, 2004) and categorised into three levels, namely pre-reflective thought, quasi-reflective thought, and reflective thought (Columbus, 2005; Moseley, 2005) (as shown in Table 3).

**Table 3***The Reflective Judgement Model, According to King and Kitchener*

<b>Levels</b>	<b>Stages</b>	<b>View of knowledge</b>	<b>Concept of justification</b>
Pre-reflective thought	Stage 1	Knowledge is absolute and certain.	Views need no justification, they are perceived as the truth.
	Stage 2	Knowledge can be obtained via authorities or personal experience.	Views are justified or unjustified by authority figures.
	Stage 3	Certain knowledge exists. Uncertain knowledge is temporary.	Authorities justify views that are certain. Uncertain views are justified as personal views.
Quasi-reflective thought	Stage 4	Knowledge is uncertain.	Reasons and evidence are provided to justify views.
	Stage 5	Knowledge is subjective.	Views are justified in certain contexts.
Reflective thought	Stage 6	Knowledge is constructed from a variety of sources.	Views are justified by comparing different opinions and perceptions.
	Stage 7	Knowledge comes from a long process of reasonable inquiry.	Views are justified after different scenarios have been considered and compared.

Note: Assembled from King and Kitchener (2004)

As shown in Table 3, during pre-reflective thinking, the observations of an individual are accepted as the truth (Moseley, 2005) and are considered absolute since they are obtained from personal experience (West, 2004). Dimensions of right and wrong exist (Columbus, 2005), and it is considered that authorities have the right information (Heywood, 2000). This is similar to Perry's first stage of dualism and Baxter Magolda's stage of absolute knowing. The next level

is the level of quasi-reflective thought (Moseley, 2005). On this level, it is established that uncertainties do exist (West, 2004), which leads to the development of more subjective thought (Merriam, Caffarella, & Baumgartner, 2012). According to West (2004), this level is similar to Perry's stage of multiplicity and Baxter Magolda's stage of independent knowing. On the last level of reflective thought, students gain the ability of reflective modification (Moon, 2007). Students come to understand that evidence is needed to support opinions and views (Schuh, Jones, & Harper, 2010), which is similar to Perry's stage of relativism. On this level, students acknowledge that contextual information is necessary to understand knowledge (Moseley, 2005).

In summary, Piaget (2001) and Vygotsky (1978) formed the basis of our understanding of individuals' cognitive development. While Piaget (2001) was the first to identify stages of development individuals' experience, Vygotsky (1978) added the importance of the influence of social interaction on intellectual development. The theories of Perry (1981), Baxter Magolda (1992, 2007, 2012), and King and Kitchener (2004) show similarities regarding students' reasoning methods and their development. As seen in the theories of Perry (1981), Baxter Magolda (1992, 2007, 2012), and King and Kitchener (2004), students enter university with the notion that all knowledge is learned from authorities and other intellectuals. As students progress through university, they begin to acknowledge the importance of contextual information and the effect it has on their personal views and beliefs. This movement along the cognitive developmental continuum enables students to adjust to the cognitive and academic challenges they face in higher education learning expectations.

## **2.3 Psychosocial Development**

The psychosocial domain includes the growth and change in individuals' emotions, self-esteem, social and interpersonal skills, and temperament (Gordon & Browne, 2013). University students find themselves in a significant period of psychological growth, since this is the time identity formation occurs (Blimling, 2010), and they face new and different social situations (Mudhovozi, 2012). Erikson's theory regarding the different stages in psychosocial development, as well Chickering's model of seven vectors, is considered in the following section.

### **2.3.1 Erikson's theory of psychosocial development**

Erikson proposed a theory of developmental progression in psychosocial development throughout an individual’s life span (Watts, Cockcroft, & Duncan, 2009). Erikson (1980) structured psychosocial development into eight stages, as shown in Table 4. In each developmental stage, a new task or crisis must be resolved to form positive self-esteem and develop the capability to overcome problems in the environment (Kearns, 2013; Newman & Newman, 2011). If these developmental tasks are not solved in a positive manner, the individual may experience some difficulties in completing future developmental tasks (Cohen et al., 2013).

**Table 4**

*Eight Stages of Psychosocial Development as Proposed by Erik Erikson*

<b>Psychosocial Crisis/Task</b>	<b>Age</b>	<b>Psychosocial Stage</b>
Trust vs. Mistrust	0-12 months	Infancy
Autonomy vs. Shame/doubt	1-3 years	Toddlerhood
Initiative vs. Guilt	3-6 years	Early school age
Industry vs. Inferiority	6-12 years	Middle childhood
Identity vs. Role Confusion	12-18 years	Early Adolescence
Intimacy vs. Isolation	18-34 years	Early Adulthood
Generativity vs. Stagnation	34-60 years	Adulthood
Ego Integrity vs. Despair	60 years and beyond	Old Age

Note: Table assembled from information from Cohen et al., (2013), Erikson (1980), Kearns (2013), and Newman and Newman (2011).

Students are mostly associated with the tasks regarding the development of identity and intimacy (Subrahmanyam & Smahel, 2010). Although Erikson never used the term *emerging adulthood*, he did refer to a state of prolonged adolescence during which individuals do not yet have all the responsibilities of adults, but are still facing role exploration (Arnett, 2000b). Arnett (2015) states that emerging adults develop an identity when they are faced with all of the explorations regarding love and work. As individuals form their identity, they develop firm values and beliefs, which influence the social relationships they might form. During the crisis of intimacy versus isolation, individuals face the choice of being intimate with another person, or developing social isolation (Cohen et al., 2013).



### 2.3.2 Chickering’s seven-vector model of psychosocial development

One of the most applied theories of student development is Chickering and Reisser’s seven-vector model of psychosocial development, in which Chickering indicates how students’ environment will facilitate their development of psychosocial skills by means of seven vectors (Chickering & Reisser, 2005; Skipper, 2005). Each of these vectors focuses on the emotional, ethical, interpersonal, and intellectual facets of student development (Evans et al., 2009). Development through these seven vectors is not necessarily linear, and students may move between vectors or revisit previous vectors as they continue with their development (Evans, et al., 2009; Skipper, 2005). The journey through these vectors allows students to become individuals in relation with their peers (Chickering & Reisser, 2005). These seven vectors are summarised in Table 5.

**Table 5**

*Seven Vectors of Psychosocial Development, According to Chickering and Reisser*

<b>Vector</b>	<b>Description</b>
Developing competence	Students develop physical, intellectual, and interpersonal competence.
Managing emotions	Students learn how to recognise emotions and how to handle and express them appropriately.
Moving through autonomy toward independence	Students develop emotional independence, instrumental independence, and interdependence.
Developing mature interpersonal relationships	During this vector, relationships that contribute to students’ identity are recognised.
Establishing identity	All aspects of identity are acknowledged in this vector, including self-concept, gender, race, and cultural and social differences.
Developing purpose	Students set goals and commit to relationships, personal activities, and interests.
Developing integrity	Students develop personal values that become congruent over time.

Note: Assembled from Chickering and Reisser, (2005), Evans et al., (2009), and Heywood (2000).

The first vector in Chickering's seven-vector model is named 'developing competence'. Developing competence refers to the gaining of abilities in three fields that, according to Andreatta (2011), are interpersonal skills and relations, critical thinking and writing, as well as physical skills and basic health. During the first vector, students have the opportunity to readjust their social and intellectual competence, since it differs from high school to university (Skipper, 2005). The main goal in the first vector is for students to achieve a level of competence in all the necessary fields (Porter, 2007).

The second vector is called 'managing emotions'. During students' first year, the academic pressure increases, since the environment differs significantly from their high school environment. Students can experience either positive or negative emotions and may learn how to cope with the balancing of these emotions (Skipper, 2005). Students can learn how to express their emotions in a healthy way (Andreatta, 2011). Therefore, the second vector offers the opportunity for students to learn how to adjust to their new environment by learning how to control and express their emotions (Chickering & Reisser, 2005).

The third vector in Chickering's seven-vector model is 'moving through autonomy toward independence'. According to Porter (2007), university allows a platform where students can direct their own behaviour. Students will learn to be confident enough to set goals they have chosen for themselves (Chickering & Reisser, 2005), and to depend on one another, rather than their parents (Skipper, 2005). Andreatta (2011) states that students have the opportunity to learn emotional and instrumental independence during the third vector.

During the first year at university, students will be in the position to develop relationships with other students. The fourth vector of Chickering's model is 'developing mature interpersonal relationships'. Students will focus on developing mature emotional relationships with fellow students, since socialisation is an important part of their experience (Skipper, 2005). In this vector, students may learn to tolerate and respect differences in people while interacting with them, as well as the capacity for intimate relations (Andreatta, 2011; Chickering & Reisser, 2005). Furthermore, students may now develop healthy relationships with others based on mutual respect and understanding of one another.

The fifth vector is 'establishing identity'. According to Skipper (2005), students have to deal with a number of individual issues before they can truly develop and understand their identity. It is important for students to have developed the ability of competence, managing emotions, positive relationships, and independence to truly develop their identity in the fifth vector (Andreatta, 2011; Chickering & Reisser, 2005). The development of abilities during the previous vectors can facilitate the development of identity during the fifth vector. Students will face issues, such as their sexuality, their body and appearance, sense of self, culture, history, role in society, self-esteem, and personal stability (Skipper, 2005).

The sixth vector of Chickering's model is 'developing purpose'. Students now have to be able to evaluate their interests and identity in order to plan for the future by setting goals (Chickering & Reisser, 2005). Andreatta (2011) agrees and writes that students can only successfully develop a purpose if they have successfully established their identity. Furthermore, Porter (2007) also mentions that students are now in the position to recognise specific goals they would like to achieve. During the sixth vector, students will develop their purpose and may change their degree, or choose a different path, in order to reach their goals (Skipper, 2005).

The seventh vector, 'developing integrity', usually happens after university and outside classes, where students make the values they have been taught, their own (Skipper, 2005). According to Chickering and Reisser (2005), students now have the opportunity to humanise values, personalise values, and develop congruence. Students commit to certain personal values and learn how to act congruently (Evans et al., 2009). During the last vector, students will develop a sense of congruence, and their behaviour will begin to match their values (Andreatta, 2011).

When considering the psychosocial theories of Erikson and Chickering, it is clear that the main development first-year students experience as emerging adults includes identity formation and the development of intimate relationships. Students may form social relationships that are more intimate with other students if they have been successful in the exploration of their identity. When considering Erikson and Chickering's theories, it is clear that students will adjust and thrive if they find ways to develop competence, emotional regulation, independence, mature interpersonal relations, purpose, and integrity while interacting with the higher education environment.

## **2.4 Chapter Summary**

In this chapter, student development was conceptualised from a life-span perspective. The cognitive and psychosocial developmental tasks students have to achieve to make adjustment to the higher education environment possible were discussed in detail.

## CHAPTER 3: ADJUSTMENT

The aim of this chapter is to provide a theoretical grounding for the construct *adjustment*. In this chapter, different views are used to define and conceptualise adjustment. In addition, an overview of various perspectives of adjustment in higher education is provided. The different aspects of adjustment (social adjustment, academic adjustment, personal-emotional adjustment, and attachment) are discussed in detail. Finally, the adjustment of first-generation and non-first-generation students is considered.

### 3.1 Defining Adjustment

The perspective and context from which adjustment is investigated influence the manner in which it is defined. In the literature, the terms *adjustment* and *adaptation* are often used interchangeably. Adjustment refers to the process in which people maintain a balance between their various needs and obstacles in their personal lives, and their immediate environment. Thus, it is a fundamental aspect in the organisation of life situations (Ganai & Mir, 2013). Mangal (2002) explains adjustment as the situation in which the interacting factors change or adjust, to suit one another better. According to Weiten, Dunn, and Hammer (2014), adjustment can be considered as the different ways people cope with tasks they face in everyday life. Adjustment can also be considered as the manner in which individuals face their challenges directly (Seville, Punsalan, Rovira, & Vendivel, 2006).

Individuals have various biological and socio-psychological needs (Mangal, 2002). Satisfying those needs leads to adjustment, progress, and development (Bustos, Malolos, Ramirez, Ramos, & Bustos-Oros, 1999; Mangal & Mangal, 2015). Individuals' basic needs for survival urge them to adjust to the ever-changing environment (Mangal, 2002).

Adjustment is a continuous process (Seville et al., 2006). Each time a certain need is satisfied, another need is waiting (Bustos et al., 1999). During the process of adjustment, an individual passes from an initial stage towards a final stage where he or she functions fully adjusted in a state of well-being (Clinciu, 2012). During this continuous process of adjustment, individuals and their environment will continue to change and adjust, until a state of self-actualisation has been reached (Mangal, 2002).

For the purpose of this study, adjustment is regarded as the continuous process during which students acquire the skills to cope with the challenges and demands of the higher education

environment to satisfy their physiological, psychosocial, and academic needs (Ganai & Mir, 2013; Hoare, 2001; Mangal, 2002; Nevid, 2008; Seville et al., 2006; Weiten et al., 2014). Adjustment to university is regarded as a complex process with a variety of challenges to which students need to adjust (Soledad, Carolina, Adelina, & Fernanda, 2012).

### **3.2 Perspectives on Adjustment in Higher Education**

Many theories have been developed regarding the dynamics of students' adjustment to higher education. In the next section, various perspectives on student adjustment are discussed.

#### **3.2.1 Tinto's theory on student departure**

Tinto's theory on student integration and departure is well known in the area of student affairs (Tinto, 2007). Tinto (2007) states that, in the past, when students did not finish their degree, the student was regarded as being incapable. Nowadays, it is important to consider the role of the university as well as the role of the student when making a judgement (Tinto, 2007). Therefore, Tinto (1975) formulated a theoretical model that explains the interactions between students and the university. His model of student departure is based on the level of academic and social integration of students, as well as the fit between students and the university environment (Pascarella, Terenzini, & Wolfle, 1986; Schultz, 2008). Students who do not successfully integrate in the academic and social environment that the university offers will be more likely to leave university (Hayes, 2008).

Tinto (2007) regards academic and social integration into the university environment as essential elements of first-year students' adjustment. Academic integration refers to teaching and learning activities and behaviour, such as making use of the library and attending academic activities offered outside the classroom (Jean, 2010). Positive academic integration encourages students to be more committed to the university (Braxton, 2000). Social integration entails students' socialisation processes on campus and includes social extracurricular activities, informal meetings with peers and attending social events offered by the university (Paulsen, 2013; Schultz, 2008; Tinto, 1975). When students manage to integrate with the academic and the social life of the university environment, they will be better adjusted (Braxton, Hirschy, & McClendon, 2011; Severiens & Schmidt, 2008; Winkle-Wagner & Locks, 2013).

### **3.2.2 Astin's theory of student involvement**

Astin's (1984) theory regarding student involvement builds on Tinto's (1975, 2007) model and is applied frequently in the field of student development (Braxton, 2000). According to Astin (1984), "student involvement refers to the amount of physical and psychological energy that the student devotes to the academic experience" (p. 518). Students who are involved dedicate a substantial amount of time to their studies, actively take part in the activities offered at university, interact with peers and lecturers, and participate in student organisations (Gavin, 2008; Rust, Dhanatya, Furuto, & Kheiltash, 2007). The student involvement theory highlights the importance of students' active participation in university life (Gerrard, 2006). When students have a high level of involvement, they will adjust better to the academic and social university life (Rust et al., 2007).

### **3.2.3 Pascarella and Terenzini's student retention theory**

Building on the work of Tinto (1975, 2007) and Astin (1984), Pascarella, Terenzini, and Wolfle (1986) describe the development of students in a variety of dimensions, including intellectually and psychosocially, and the effect thereof on students' university experience (Hinchliffe & Wong, 2012). They focus on specific variables that affect students' growth and development, such as students' personal characteristics, the effort students put into university life, academic and social integration, the university environment, and the characteristics of the institution (Long, 2012; Pascarella & Terenzini, 1979).

Students enter the university environment with specific personality traits that will moderately influence their manner of integration with the new social and academic environment (Pascarella & Terenzini, 1979). Relations with faculty members also influence students' commitment and persistence at university. The level of interaction with faculty members is an important predictor of change while attending university (Pascarella & Terenzini, 1976). Pascarella and Terenzini (1976) suppose that a positive relationship exists between students' opinions regarding university experiences and the extent of their informal relations with faculty members. Experiences students undergo during their first year are more of a predictor of persistence than background factors or goals students may have (Pascarella & Terenzini, 1983).

Thus, Pascarella and Terenzini (1976, 1977, 1979, 1983) would describe students' adjustment in terms of their involvement and interaction in the university environment, social and academic integration, commitment to the institution, level of persistence, and relations with

peers and faculty members (Pascarella & Terenzini, 1977; Pascarella & Terenzini, 1983; Reynolds-Adkins, 2008).

### **3.2.4 Kuh's theory of student engagement**

Kuh et al. (2011) describe the importance of student success and adjustment in terms of student engagement. The aspect that makes their theory unique is that it considers not only the students' engagement, but also the level of commitment the university shows to promote student engagement (Kanno & Harklau, 2012). Student success depends on the educational environment the university offers, the interaction between students and the faculty members, the support provided to students on campus, and the level of student engagement (Kuh et al., 2011).

Kuh et al. (2011) argue that different factors contribute to student engagement. Students' perceptions regarding the university environment and the academic environment provided by educators influence student engagement (Hu & Kuh, 2003). The active participation of students and the support and facilities offered to students by the university affect their success, (Kuh et al., 2011). Furthermore, the total time students spend on utilising the facilities the university has to offer, including visiting the library, making use of the resources the faculties offer, and the effort that students put into studying, affect their level of adjustment and engagement (Hu & Kuh, 2003). Carini, Kuh, and Klein (2006) suppose that the level of student engagement is a good predictor of students' academic and personal development. According to Kuh et al. (2011), what students learn and whether or not they persist during university are influenced more by their actions than by their personality.

According to Kuh, it is not only the students' responsibility to promote adjustment by means of student engagement, but it is also the responsibility of the university (Kanno & Harklau, 2012). Therefore, the university can assist in the adjustment and engagement of students by offering them a platform to share their opinions regarding the academic and social environment at their institution (Quaye & Harper, 2014).

### **3.2.5 Jama, Mapasela, and Beylefeld's theory on student progression**

Jama et al. (2008) developed their theory with a specific focus on the importance of the complex situations accompanying non-traditional students when they first enter university. Jama et al. (2008) regard background characteristics, financial issues, and especially language barriers as important considerations in the academic success and adjustment of students.

Jama et al. (2008) hypothesise that a non-traditional student moves through a variety of circles when entering university. The first circle (pre-entry) includes the family and school background of non-traditional students and the manner in which it limits their chances of progressing towards the second circle (Moagi-Jama, 2009). The second circle is the initial entry into the social and academic environment at university (Jama et al., 2008). The new environment and peers with various languages and cultures influence non-traditional students' social integration (Moagi-Jama, 2009). Furthermore, non-traditional students may experience financial stress in this circle, since the financial responsibilities of university are much larger than those of high school are (Moagi-Jama, 2009). In the third circle, students are introduced to their specific learning and academic environment, where they may experience problems with academic integration due to financial issues that may not be solved in the previous circle (Jama et al., 2008). Moagi-Jama (2009) specified that non-traditional students might have trouble with the class structure, learning programmes, and classmates in the third circle. In the final circle, continuing social and academic integration, with the help from peers and faculty members, is essential. In this circle, the non-traditional students will still need financial support to move into their careers successfully (Jama et al., 2008; Moagi-Jama, 2009). It is clear that, especially non-traditional students have to adjust to the new level of responsibility the university environment requires, including the new social communities and financial responsibilities (Jama et al., 2008).

Thus, for Jama et al. (2008), adjustment entails acceptance of and adjustment to the changing university environment to suit a variety of cultures and nationalities.

### **3.2.6 Baker and Siryk's theory on student adjustment at university**

Baker and Siryk (1989) are of the opinion that student adjustment entails adapting to the new environment, meeting strange people, and handling unfamiliar stressors and challenges at university. According to Baker and Siryk (1984), student adjustment is a multifaceted process that includes the domains of academic adjustment, social adjustment, personal-emotional adjustment, and attachment.

### ***3.2.6.1 Academic adjustment***

Academic adjustment indicates the extent to which students cope with the academic challenges and demands of university (Baker and Siryk, 1989). Students have to adjust to the new academic standard and new academic goals when entering university (Landow, 2006). First-year students face different academic challenges when they enter university, including higher levels of academic competition, larger classes, new teaching methods, increased levels of difficulty and workload, and frequent assessments and assignments (Bujowoye, 2010; Mudhovozi, 2012).

According to Otlu (2010), the domain of academic adjustment includes students' motivation and attitude towards their academic goals, if and how these academic goals are met, students' academic performance, and their overall level of satisfaction with their academic environment. Factors such as personal responsibility and high school preparation also affect students' academic adjustment (Mudhovozi, 2012). Students' overall adjustment, academic adjustment, and performance are related intricately (Mudhovozi, 2012).

### ***3.2.6.2 Social adjustment***

Baker and Siryk (1989) describe social adjustment as the way students utilise the various social and interpersonal circumstances to which they are exposed while attending university. These adjustment issues typically include forming new relationships, adjusting to new peer groups, dealing with a new social environment, various social activities, and managing newfound independence (Barry et al., 2009; Landow, 2006; Otlu, 2010). Social adjustment entails students' competence in meeting the interpersonal and societal demands of the university environment (Abdullah et al., 2009).

Social adjustment is an essential process for all individuals, but it is especially vital for undergraduate students who experience the process of individualisation during their first year at university (Kyalo & Chumba, 2011). Weiten et al. (2014) emphasise the importance of successful social relationships and the positive effect they have on adjustment. Social adjustment is regarded as imperative for the successful transition to university (Yau, Sun, & Cheng, 2012). Furthermore, social adjustment is very important for students' persistence at university (Gray, Vitak, Easton, & Ellison, 2013). To show progress and growth successfully (Evans et al., 2009), students need to aspire to gain a wide-ranging set of social abilities and life skills (Jenney, 2011).

To adjust successfully in both social and academic areas, it is important to have access to supportive social relationships (Mudhovozi, 2011). Yau et al. (2012) state that students' sources of social support may include friends, lecturers, and the university environment.

### ***3.2.6.3 Personal-emotional adjustment***

According to Abdullah et al. (2009) and Otlu (2010), personal-emotional adjustment entails students' psychological well-being and physical well-being during their adjustment at university. During the first year at university, students experience much personal growth, which might entail stress and anxiety (Schultz, 2008). Personal-emotional adjustment relates to the physical or psychological anxiety students may experience during their first year of study (Baker & Siryk, 1989). According to Weiten et al. (2014), first-year students may experience a marked amount of pressure due to expectations set by themselves and their parents.

According to Dittman, McKinney, and Trimble (1994), students who show lower levels of personal-emotional adjustment are also more anxious and more dependent on parental support, and they have fewer coping mechanisms. When students show low levels of personal-emotional adjustment, it will likely influence their help-seeking behaviour (negatively) when struggling with academic problems (Crede & Niehorster, 2011). Furthermore, students who make use of the psychological assistance programmes at university show higher levels of personal-emotional adjustment than do students who do not make use of the university's counselling services (DeStefano, Mellott, & Peterson, 2011).

### ***3.2.6.4 Attachment***

The last aspect of adjustment, attachment, can be understood as students' feeling of commitment and belonging to their university of choice (Abdullah et al., 2009; Baker & Siryk, 1989; Beyers & Goossens, 2002). Pittman and Richmond (2008) suppose that attachment to university is more than the formation of successful relationships with people at university. Schultz (2008) refers to attachment as an important factor explaining the relationship between students and their university. Cohorn and Giuliano (1999) found that students' attachment to their university is dependent on their level of social adjustment. Furthermore, Schultz (2008) states that students who experience a low sense of attachment are less likely to persist in their studies. Institutions can improve students' institutional attachment by enhancing communication between the university and the students (Brown, 2008).

All four of these domains of adjustment are related intricately. Social adjustment will have a positive influence on students' academic adjustment and psychological adjustment (Yau et al., 2012). The support students receive from the university and faculty members will influence their academic adjustment, whereas support from family members and peers will influence students' personal-emotional adjustment (Crede & Niehorster, 2011). Furthermore, social integration will also influence the level of attachment students have toward the university (Schultz, 2008).

### **3.3 Adjustment during the First Year of University**

University is regarded as a highly dynamic environment. The transitional experience from high school to university life includes aspects of academic adjustment, social adjustment, and psychological adjustment (Salami, 2011; Soledad et al., 2012; Yau et al., 2012). Especially the first year of university, and more so the first semester of the first year, plays a crucial role in the adjustment of university students (Clinciu, 2012). According to Salami (2011), students have to adjust to different aspects offered by the new university environment, and poor adjustment of students can lead to numerous implications. Furthermore, Sharma (2012) states that a variety of demands accompany the adjustment to university, which requires students to make different adjustments to cope with these demands properly.

Students handle adjustment challenges differently. Some may fail to cope with the transition and be overwhelmed, while others will handle the transition positively (Mudhovozi, 2012). According to Clinciu (2012), several issues related to university can add to negative adjustment, such as stress, anxiety, depression, vulnerability, and anger. On the other hand, positive adjustment is influenced by factors such as the ability to find new coping mechanisms and positive self-esteem (Clinciu, 2012). During this process of adjustment, students utilise the available resources in the environment and their personal resources to adjust as positively as possible.

### **3.3.1 Adjustment of first-year students in general**

The university environment introduces students to a new academic and social environment, in which they have to manage familial relationships and deal with physical challenges (Funston, Gil, & Gilmore, 2014). McIlroy (2003) mentioned that it is common for students to feel overwhelmed by all the new situations with which they are presented.

The new academic life is one of the key challenges when entering higher education (Machado et al., 2002). When students first arrive at university, they typically do not know what to expect from their chosen learning programmes (Tynjala et al., 2012) and they face an academic structure filled with intellectual challenges that is different from what they are used to (Blimling, 2013; Jindal-Snape & Rienties, 2016). Wilcox, Winn, and Fyvie-Gauld (2005) found that difficulties students experience with independent study is one of the main reasons why they leave university. The student environment no longer includes structured timetables and supervision during studies (Wittenberg & Clinic, 2001), but rather poses new demands and different approaches to academic work (Tynjala et al., 2012). McIlroy (2003) states that students tend to fail academically, not due to a lack of ability, but due to ill-structured study methods and failure to submit assignments in time. Adjusting to the new academic environment would require students to participate in class discussions, attend classes, and form formal relationships with their lecturers (Winkle-Wagner & Locks, 2013). According to Crede and Niehorster (2011), students who have the support of members in their faculty, teachers, and mentors adjust better to the academic environment. This clearly relates to Tinto's (1975, 2007) theory concerning academic integration. The successful integration of students in their new academic environment includes making use of the academic support systems (library facilities, lecturers, and mentors) available to them (Jean, 2010; Tinto, 2007).

Considering the above-mentioned challenges, it is clear that students will be prompted to strive towards thinking processes that are more abstract, as Piaget (2001) suggests. Students' cognitive schemas will be broadened to accommodate the different features of their new environment (McIlroy, 2003). To adjust to the academic expectations of higher education learning, students are also prompted to develop from just memorising and repeating well-structured pieces of information towards finding their own voice and applying knowledge in context (Perry, 1981; Baxter Magolda, 2012)

In addition to the above-mentioned academic challenges, first-year students are also confronted with various social challenges. When students first arrive at university, they experience a new and strange environment with unfamiliar people (Tynjala et al., 2012) and difficult social situations (Blimling, 2013). This new social environment requires students to adjust to the new relationships they face (Jindal-Snape & Rienties, 2016). University life introduces students to a variety of lifestyles and types of interpersonal relationships (Andreatta, 2011; Park, Edmondson, & Lee, 2011). In addition to this, students have to face the fact that they are away from their family and friends at home (McIlroy, 2003). Students who have the social support from their parents, peers, and family adjust better on social and personal-emotional levels, than do students who have a lack of social support (Crede & Niehorster, 2011). The transition to university affects the level of support from family and friends (Salami, 2011). Students are now regarded as adults (Wittenberg & Clinic, 2001). They now have the opportunity to learn how to act independently (Skipper, 2005). It is expected of students to start acting responsibly and demonstrate maturity (McIlroy, 2003). As students begin to form their independence, they develop more mature relationships with peers and rely less on support from their parents (Wilcox et al., 2005).

All these social challenges relate to students' identity formation and interpersonal relationship development (Chickering et al., 1969; Erikson, 1980). Movement along Chickering and Reisser's (2005) vectors of psychosocial development, such as the development of emotional regulation, independence, mature interpersonal relations, purpose, and integrity, while interacting with the higher education environment, is facilitated.

On a more practical level, the physical environment to which first-year students are introduced can be considered a challenge, since they have to navigate between big buildings and a large campus. The new environment not only offers bigger classes and faculties but also a diversity of nationalities and cultures (Game & Metcalfe, 2003).

Thus, it can be concluded that first-year students will experience a range of academic, social, and physical stressors when they first enter university, resulting in personal and emotional pressures.

### **3.3.2 Adjustment of first-generation students**

All the challenges discussed above are intensified when faced by students who are the first in their family to attend higher education (Thomas & Quinn, 2007). First-generation students are

prone to struggle in the academic areas of university (Darling & Smith, 2007) and they do not experience the university environment as academically supportive (Ward, Siegel, & Davenport, 2012). Ward, Siegel, and Davenport (2012) found that the academic performance of first-generation students is not as promising as that of non-first-generation students. Pascarella, Pierson, Wolniak, and Terenzini (2004) state that first-generation students are not on the same level as their peers regarding their knowledge of university life, the issues that accompany it, and the academic preparation that is necessary in high school. Jean (2010) states that first-generation students often do not have the high school preparation that is necessary to ensure success at university. Academically, first-generation students tend to be less prepared than non-first-generation students are (Harvey & Housel, 2011; Saenz, Hurtado, Barrera, Wolf, & Yeung, 2007). Padgett, Johnson, and Pascarella (2012) suggest that first-generation students are at a disadvantage regarding cognitive aspects of development due to their parents' level of education. The educational level of parents is a significant factor in the academic success of students (Jean, 2010; Pascarella et al., 2004). Thus, the fact that first-generation students' parents did not attend higher education may be regarded as a negative influence on their academic adjustment at university.

Along with the difference in academic adjustment, first-generation students also experience the new social environment as a challenge (Jehangir, 2010). First-generation students face a lack of support by family members (Harvey & Housel, 2011; Hicks & Pitre, 2012; Westbrook & Scott, 2012). Ward et al. (2012) suggest that some first-generation students' parents may even discourage them from attending university, since they lack experience and information regarding university life. First-generation students are more likely to live off campus, work off campus, and study part time, which gives them the feeling of being socially isolated from the rest of the students (Ward et al., 2012). They tend to have responsibilities outside of university that affect their interaction with peers outside of class (Pascarella et al., 2004). It may be argued that the lack of social integration first-generation students experience may facilitate their psychosocial development, since they have to work harder at their social integration than non-first generation students do (Blimling, 2015; Hicks & Pitre, 2012).

The social isolation experienced by first-generation students is reduced in some manner when these students form a social support group at university to assist one another in the transition (Thomas, Porfilio, Gorlewski, & Carr, 2014). It is important for first-generation students to

participate in purposeful activities on a social level, both inside and outside the classroom to adjust better to their new social environment (Ward et al., 2012).

### **3.4 Chapter Summary**

In this chapter, the term *adjustment* was defined and conceptualised. Different theories and perspectives on the adjustment of students in higher education were discussed. Furthermore, adjustment during the first year of university, as well as the adjustment challenges of both first-generation and non-first-generation students, was discussed in detail.

## **CHAPTER 4: METHODOLOGY**

In this chapter, the research methods and procedures utilised during the study are discussed. Firstly, the rationale and aim of the study is presented, as well as the research questions posed. Secondly, the research approach and design are explained. Thirdly, the sampling procedures and participants are described. Next, the procedures of data collection and data analysis are reviewed. Finally, the ethical considerations and the issues of trustworthiness pertaining to the present study are presented.

### **4.1 Research Rationale, Aim and Questions**

Considering the discussions in the previous chapters, it is clear that university life presents students with various adjustment challenges, especially during the first year at university. The degree to which first-year students adjust to these challenges can be regarded as a precursor of adjustment during the rest of their university life. Different generational groups adjust differently to university life.

Therefore, the aim of this study was to investigate the differences in adjustment between first- and non-first-generation students during the first year at university. The following research questions were investigated:

1. Are there significant differences in adjustment between students from different generational groups during their first year?
2. What perceptions do students from different generational groups have regarding their adjustment during their first year?

### **4.2 Research Approach and Design**

To investigate the research questions, a mixed-methods research approach (utilising both quantitative and qualitative aspects) was followed, incorporating an exploratory and descriptive cross-sectional design. The justification for using these research designs, as well as the advantages and disadvantages of each design, is discussed in the following section.

#### **4.2.1 Mixed-methods research approach**

A mixed-methods approach is described as the combination of certain elements of quantitative and qualitative research methods (Sandelowski, 2000; Spitzlinger, 2010; Tashakkori &

Teddle, 2010). The use of both quantitative and qualitative methods provides a broader and deeper perspective to a study (Onwuegbuzie & Leech, 2005). The combination of these research methods makes provision for the use of statistics, as well as in-depth investigations (Spitzlinger, 2010). Furthermore, Denscombe (2007) adds that the use of the two research approaches (quantitative and qualitative) may provide a more accurate result, since the same topic is being investigated using two perspectives instead of one. In the present study, the use of a mixed-methods approach ensured the thorough investigation of adjustment by considering the adjustment levels (and differences) in generational groups, as well as the deeper perceptions and dynamics of this adjustment.

Quantitative research entails the collection of information that can be analysed on a statistical level by applying mathematical methods (Goertz & Mahoney, 2012; Goodwin, 2009). The quantitative data obtained are examined in detail using precise statistical methods that allow the results to be generalised to the larger population (Bennett & Jessani, 2011). The use of quantitative methods minimises the possibility of personal bias (Taylor, 2005). While the gathering of a large amount of observations encourages a broader statistical analysis of the data (Mahoney & Goertz, 2006), quantitative analyses do not always allow in-depth exploration (Muijs, 2010; VanderStoep & Johnson, 2008). During this study, the use of the quantitative approach provided information regarding the level of adjustment, as well as the differences in adjustment between different generational groups.

Qualitative research is known to be a naturalistic approach (Smith, 2007). Muijs (2010) and VanderStoep and Johnson (2008) suggest the application of qualitative methods to investigate a concept in depth. This approach ensures exploring and describing research participants' perceptions (Baxter & Jack, 2008; Johnson & Christensen, 2010; Smith, 2007). The process of qualitative research may be regarded as extensive and time consuming, since it involves the interpretation of subjective opinions (Goodwin, 2009). Smith (2007) warns that qualitative data may be influenced by the researcher, since it is interpreted subjectively. However, the researcher's subjective input during the research process may also be regarded as beneficial (Smith, 2007). For the purpose of this study, the use of qualitative research allowed the exploration of students' perceptions and opinions regarding adjustment during their first year.

#### **4.2.2 Cross-sectional research design**

In addition to following a mixed-methods approach, a cross-sectional research design was followed. This design includes the gathering of data from different groups of participants during the same period in time (Johnson & Christensen, 2010; Muijs, 2010). According to De Vaus (2001), a cross-sectional design relies on differentiations that are already present, rather than on monitoring change over a period. It can be considered an advantage to complete the data collection rather than follow the sample group over time, since this design allows the possibility to collect all the data at once (Jackson, 2014; Nairne, 2013). However, as stated by Cooligan (2014), the disadvantage of a cross-sectional design is that changes within a specific individual cannot be tracked. Shaffer (2004) writes that the development of the participants over time cannot be followed. A cross-sectional design was relevant to this study, since it allowed comparison of different groups within the chosen sample group (different generational groups). This design allowed the collection of a large amount of data at a single point in time.

#### **4.2.3 Exploratory and descriptive design**

This study also followed an exploratory and descriptive design. Exploratory studies are conducted when limited knowledge regarding a certain topic exists and more information is gathered to obtain better understanding and deeper insights into the certain aspects of the topic being investigated (Babbie, 2007; Kumar, 2014; Salkind, 2010). In following a descriptive design, the aim is to provide an accurate description of the variables and situations being investigated, without aiming to explain or predict (Jackson, 2014; Kumar, 2014; Salkind, 2010). These designs are ideal for primary research (Gravetter & Forzano, 2011). In the present study, explorative and descriptive research designs were used during both the quantitative and qualitative sections of the study.

### **4.3 Research Participants and Sampling Procedures**

The population of interest in this study consisted of first-year students who were enrolled at the UFS. Inclusion and exclusion criteria applied. Students of all genders and race groups were included in the study. As the traditional age of undergraduate students ranges from 18 to 23 (Nicoteri & Arnold, 2005), students with ages outside this range were excluded from the study. Furthermore, students who were participating in first-year studies but who were not in their first year at university were excluded from the study. Different sampling methods were applied for the quantitative and qualitative sections of the research.

### 4.3.1 Quantitative sampling procedures

For the quantitative section of the study, first-year students were recruited by means of non-probability convenience sampling. Convenience sampling allows the use of readily available sample groups (Onwuegbuzie & Collins, 2007; Teddlie & Yu, 2007). Sekaran and Bougie (2010) state that an advantage of convenience sampling is that information can be gathered quickly and conveniently. However, a major disadvantage of a convenience sample is the fact that it is not random, and therefore not a true representation of the larger population (Fink, 2003), which restricts its generalisability (Nezu & Nezu, 2007). In the current study different first year classes in the Faculty of the Humanities were approached to participate. In Table 6, the demographic characteristics of the sample group are summarised.

**Table 6**

*Demographic Information Regarding the Quantitative Sample*

		<b>Frequency</b>	<b>Percentage (%)</b>
<b>Gender</b>	Male	20	16.4
	Female	102	83.6
<b>Race</b>	Black	56	45.9
	White	56	45.9
	Coloured	8	6.6
	Other	2	1.6
<b>Generational status</b>	First-generation	52	42.6
	Non-first-generation	70	57.4
	Total	122	100.0

In total, the sample consisted of 122 first-year students. From Table 6, it is apparent that there were more female participants (83.6%) than male participants (16.4%). The sample group mainly consisted of black (45.9%) and white (45.9%) students. The rest of the participants were either coloured (6.6%) or from other racial groups (1.6%). The first-generation participants (42.6%) and the non-first-generation participants (57.4%) were represented relatively equally.

### 4.3.2 Qualitative sampling procedures

For the qualitative part of the study, participants were selected purposively for individual interviews based on their generational status. Purposive sampling can be described as non-random because participants are chosen based on certain characteristics identified by the researcher (Johnson & Christensen, 2010). The use of this sampling strategy can be regarded as informationally representative rather than statistically representative (Sandelowski, 2000), since students are selected based on certain set parameters (first-generation or non-first-generation students). It can be regarded as beneficial to select participants purposively, since this can provide more specific information (Sekaran & Bougie, 2010) than when students are selected randomly for interviews. In this study, the use of a purposive sampling procedure made in-depth information regarding both generational groups possible. In the current study, six female students from both generation groups participated (as shown in Table 7).

**Table 7**

*Demographic Information of the Qualitative Sample*

<b>Participant</b>	<b>Race</b>	<b>Gender</b>	<b>Generational Status</b>
<b>Participant 1</b>	White	Female	Non-first-generation
<b>Participant 2</b>	Black	Female	Non-first-generation
<b>Participant 3</b>	Black	Female	Non-first-generation
<b>Participant 4</b>	Black	Female	Non-first-generation
<b>Participant 5</b>	Black	Female	First-generation
<b>Participant 6</b>	White	Female	First-generation

### 4.4 Procedures of Data Collection

In this mixed-methods study, data collection occurred in a quantitative and qualitative section. In the quantitative section, a biographical questionnaire and the *Student Adaptation to College Questionnaire* were distributed. Semi-structured interviews formed part of the qualitative

section. The data were gathered during the third quarter of the year, which allowed the students an adequate amount of time to reflect on their adjustment during the first half of the year.

#### **4.4.1 Quantitative data-collection procedure**

For the quantitative section of the study, a biographical questionnaire was administered to gather information regarding the participants' age, gender, race, year group, and generational status. This questionnaire also required the students to indicate whether they were available to participate in the qualitative section of the study.

An appropriately structured self-report measure was used. Self-report measures can be described as a method that allows participants to respond to questions specifically selected by the researcher, in the form of either an interview or questionnaire (Nezu & Nezu, 2007; Polit & Beck, 2013). Jex and Britt (2008) stated that self-report measures enables the researcher to measure the participants' personal views regarding their environment and emotional state, which aids the determination of human behaviour. A definite advantage of self-report measures, by using questionnaires, is that it is easily distributed and time efficient when considering the size of the sample group (Maruish, 2004; Polit & Beck, 2013; Whitley & Kite, 2009). One disadvantage Whitley and Kite (2009) mention is that it is easy for participants to alter their responses and thus conceal the truth. The participants' responses may be influenced by their current situation and environment. Participants may also answer in a way that could make them appear better or worse than they truly are or in a way that would make them more socially acceptable (Heppner, Wampold, & Kivlighan, 2007). The use of self-report measures in the present study was appropriate, seeing that they allowed quick and effective gathering of information. It allowed the gathering of a large amount of information from a large sample group. The participants were able to give their views and perceptions on adjustment during their first year.

To measure student adjustment, the *Student Adaptation to College Questionnaire (SACQ)* (Baker & Siryk, 1989) was administered. The *SACQ* was developed by Baker and Siryk (1986). It is one of the leading measures of student adjustment (Paulsen, 2013). This questionnaire was developed originally to provide a reliable and valid measure to offer help to students who struggle to adjust to university (Baker & Siryk, 1986). Overall, this measure is regarded as a useful instrument to measure the adjustment of university students while considering cognitive and emotional factors related to the university environment (Paulsen, 2013).

The SACQ is a 67-item, self-report questionnaire appropriate for undergraduate university students. The questionnaire consists of 9-point Likert scale items on which students can assess their adjustment in respect to each statement (Baker & Siryk, 1989). A high score indicates a high level of adjustment, whereas a low score indicates a low level of adjustment. The SACQ measures students' overall adjustment, as well as their adjustment related to four subscales, namely academic adjustment, social adjustment, personal-emotional adjustment, and attachment. The academic adjustment subscale (consisting of 24 items) measures the extent to which students cope with the academic challenges and demands of university. The different social and interpersonal challenges students experience are measured by the social adjustment subscale (consisting of 20 items). Furthermore, the personal-emotional adjustment subscale (consisting 15 of items) measures the physical or psychological anxiety students may experience during their first year of study. The last aspect of adjustment, the attachment subscale (consisting of 15 items), measures students' feeling of commitment and belonging to their university of choice (Baker & Siryk, 1989).

Waller (2009) investigated the internal consistency of various applications of the scale on students in higher education institutions. The reliability of the total scale ranged from 0.89 to 0.94 in the various studies. The alpha coefficients for the various subscales ranged from 0.82 to 0.90 (for academic adjustment), 0.73 to 0.91 (for social adjustment), 0.78 to 0.89 (for personal-emotional adjustment), and 0.84 to 0.90 (for attachment) (Waller, 2009).

In the present study, the SACQ was adjusted slightly to fit the sample group and the topic being investigated better. Only three of the subscales were used, namely academic adjustment, social adjustment, and personal-emotional adjustment. The subscale regarding attachment to the institution was not included. Certain terms were altered in the questionnaire to make it more applicable to the university context in South Africa. The word 'quarter' was removed, since South African universities use the term 'semester'. The term 'college' was changed to 'university', 'professor' to 'lecturer', 'papers' to 'assignments', 'dormitory' to 'hostel/housing', 'program' to 'programme', and 'expenses' to 'finances'. Questions 26, 33, and 31 were also shortened for the sake of clarity.

#### **4.4.2 Qualitative data-collection procedure**

Qualitative data for the present study were gathered by means of semi-structured individual interviews. Interviews allow the exchange of information by means of verbal exchange (Varga-

Atkins & O'Brien, 2009), where the purpose is to obtain more in-depth and contextual information regarding a specific issue (Boyce & Neale, 2006). Hatch (2010) agrees by stating that individual interviews allow the interviewer to gather in-depth data concerning specific issues. The data obtained from interviews include direct quotations from the participants' opinions (Patton, 1987). A disadvantage of semi-structured individual interviews is that participants might want to impress the interviewer; therefore, they may not be as forthcoming regarding the truth (Hays & Singh, 2011). According to Klenke (2008), another disadvantage is that the data are not always generalisable to a larger population. It is also possible that the interviewer may have biases regarding the topic and therefore influence the information being gathered (Reiss & Judd, 2000). Reiss and Judd (2000) mention the importance of identifying possible biases of the interviewer, to minimise the effect on data.

Semi-structured interviews include the use of a list of prepared questions the interviewer would like to ask the participant, not in a specific order, while being sensitive to the conversation (Gibson & Brown, 2009). The structure of the interviews usually depends on the information the researcher wants to obtain; therefore, set questions are asked to obtain certain specific information (Hesse-Biber & Leavy, 2010). According to Gibson and Brown (2009), certain important themes are identified and formulated into key questions for semi-structured interviews. Gibson and Brown (2009) suppose that, during semi-structured interviews, the conversation and questions can be guided in the direction of the research topic to gain information that is more relevant. The use of semi-structured interviews allows flexibility during the interview, in that the interview may deviate from the set questions to gain the necessary information (Miles & Gilbert, 2005).

In the present study, interviews were conducted with six participants who indicated that they were willing to participate in the qualitative section of the study. The interviewer used the interview schedule, focused on specific issues regarding adjustment, the first-year experience, and their generational status. All interviews started with building rapport with the participant and explaining the aim and procedure of the research. Thereafter, questions such as "How did you experience your first year at university?" and "How would you describe your adjustment during the course of the year?" were posed to participants. This was followed with follow up questions as required for clarification or depth. All the interview discussions were recorded and transcribed for further analysis.

#### **4.5 Data Analysis**

Various methods of data analyses were incorporated in the quantitative and qualitative sections of this study. These are discussed in the sections that follow.

#### **4.5.1 Quantitative data analysis**

For the quantitative section of the study, the reliability of the measure for this specific sample was determined by means of Cronbach's alpha coefficient. Furthermore, descriptive statistics were used to describe the manifestation of adjustment in the sample and inferential statistics (multivariate analysis of variance: MANOVA) to determine the difference in adjustment between students from different generational groups.

Cronbach's alpha coefficient was used to determine the reliability (Cronbach, 1951) of the *SACQ* in the present study. Cronbach's alpha coefficient is used to determine the internal consistency of a certain measurement (Tavakol & Dennick, 2011). The internal consistency of a measurement refers to whether or not the items in a measuring instrument measure the same concept or not (Tavakol & Dennick, 2011).

Descriptive statistics facilitate understanding of how a certain topic manifests in the sample group used in the study (Goodwin, 2009; Taylor, 2005). The descriptive statistics allows the description of characteristics of the data. The purpose of descriptive statistics is to express the data findings clearly and effectively (Healey, 2015). In this study, descriptive statistics were utilised to gain information on the mean and standard deviation scores with regard to academic, social, personal, and overall adjustment of both generational groups.

To determine if a significant difference in adjustment between students from different generational groups existed, a multivariate analysis of variance (MANOVA) (Hadzi-Pavlovic, 2010) was made. When employing a MANOVA, the significance of the difference between two identified groups on various dependent variables can be determined (Grice & Iwasaki, 2007). A MANOVA is usually followed by a univariate analysis of variance (ANOVA) to determine with regard to which of the specific dependent variables significant differences exist (Huberty & Morris, 1989). In this study, the different categories of adjustment (academic adjustment, social adjustment, and personal-emotional adjustment) were the dependent variables, and generational status was the independent variable. Before conducting the MANOVA, the data were examined to ensure that all of the underlying assumptions were met (e.g. using the Box's test of Equality of Covariance Matrices to determine whether the data violated the assumption of homogeneity). Statistical significance on both the 1% and 5% levels of significance was

considered. The practical significance of the results was investigated by determining the effect sizes.

#### **4.5.2 Qualitative data analysis**

To analyse first-generation and non-first-generation students' perceptions of adjustment during their first year at university, a thematic analysis (Braun & Clarke, 2006) was used. Braun and Clarke (2006) describe thematic analysis as a method that allows the identification and analysis of themes within data. Thematic analysis offers a flexible and comprehensible way to analyse data (Braun & Clarke, 2006). It requires the researcher to make choices regarding which information to include and which to reject, as well as how the results from the participants should be interpreted (King & Horrocks, 2010). Pope, Mays, and Popay (2007) state that the advantage of thematic analysis is that it offers a method in which the large quantities of information gathered can be organised.

According to Braun and Clarke (2006), a thematic analysis can be made by following six specific phases. The first phase requires the researcher to become familiar with all the data by transcribing and reading the data and generating initial codes (Braun & Clarke, 2006). Dempster (2011) mentions that an important part of thematic analysis is to be familiar with the information. In the second phase, initial codes are generated across the entire set of data (Braun & Clarke, 2006). Themes are then generated, and the data are organised according to these themes in the third phase (Braun & Clarke, 2006). In the fourth phase, the themes and the codes (phase one) are compared to confirm that all the data can be divided into the identified themes. According to Braun and Clarke (2006), the fifth phase includes the naming and defining of all the themes and subthemes identified. In the sixth phase, the researcher presents the report showing all the examples and quotes extracted from the data set to relate to the set research questions. In the current study, these six phases suggested by Braun and Clarke (2006) were followed.

#### **4.6 Ethical Considerations**

During this study, a variety of ethical issues were considered. At the beginning of the research, permission to conduct the study was gained from the Dean of Students at the UFS, and ethical clearance was obtained from the Research Ethics Committee of the Faculty of the Humanities, UFS (See Appendix A).

Further ethical issues that have to be addressed when research is conducted include informed consent, confidentiality, and the right of the participants to withdraw (Forrester, 2010). Informed consent is regarded as a very important part of any research project, since it promotes the participants' right to autonomy, respect, and beneficence (Escobedo, Guerrero, Lujan, Ramirez, & Serrano, 2007). When informed consent is obtained, it is essential to ensure that the participants have a clear understanding of the process to which they are agreeing (Cardwell & Flanagan, 2005). In both the quantitative and qualitative sections of the study, informed consent was obtained from the participants by using an informed consent form (See Appendix B). Before data collection commenced, the procedure and the ethical implications were explained. It was ensured that all participants signed the informed consent form.

Confidentiality, as described by Forrester (2010), refers to the non-disclosure of participants' information. Allan (2011) states, and it is confirmed by Stangor (2011), that the confidentiality and right to privacy of the participants is of utmost importance. It is the responsibility of the researcher to uphold confidentiality (Evans & Rooney, 2010). Furthermore, it is important to uphold anonymity of the participants by not disclosing any personal information that may lead to the recognition of the participant (Cooligan, 2014). King and Horrocks (2010) mention that some participants may be hesitant to disclose certain information if they are aware that their identities are not anonymous. In both the quantitative and qualitative sections of the study, confidentiality was upheld by ensuring that the data were kept in a safe and secure environment. During the present study, only the researcher, research assistants and the supervisor were allowed access to the information obtained from the students. Furthermore, no identifying information was included in the presentation of the results.

#### **4.7 Issues of Trustworthiness**

In research, it is important to ensure trustworthiness of the data and results (Osborne, 2008). Trustworthiness is ensured by considering dependability, confirmability, credibility, transferability, and research reflexivity (Marrow, 2005; Polit & Beck, 2013).

Credibility can be referred to as the accuracy of the results and findings (Pitney & Parker, 2009). By ensuring credibility, the researcher shows that the data, results, and interpretations are accurate and credible (Major & Savin-Baden, 2012; Polit & Beck, 2013). In the present study, credibility was ensured by keeping an audit trail and by recording the participants' interviews verbatim.

Transferability describes the degree to which the results can be applied to a different group or context (William, 2006). Transferability can be attained by providing specific information regarding the participants and context (Major & Savin-Baden, 2012; Morrow, 2005; Shenton, 2004). In the present study, a comprehensive description of the context in which the study was done and of the sample group is included.

Major and Savin-Baden (2012) describe dependability as the belief that the findings of the research conducted will hold over time. Dependability implies that the results of a study can be repeated or replicated (Morrow, 2005) in similar contexts and that similar results can be expected (Shenton, 2004). To ensure dependability, the researcher described the methods utilised in this study and their implementation in full.

Major and Savin-Baden (2012) describe confirmability as the notion that the researcher remains impartial, or that subjectivity is bracketed. In the present study, confirmability was ensured by triangulating quantitative and qualitative results, by including participants' direct voice and by applying researcher reflexivity.

Marrow (2005) states that it is important to be aware of subjectivity during qualitative research. Reflexivity can ensure that the researcher is less prejudiced during the collection and analysis of data (Osborne, 2008). The biases, beliefs, and prejudices towards the participants and the research topic should be identified and acknowledged (Osborne, 2008). The researcher's opinions and values should be stated as reflective commentary (Marrow, 2005; Walker, Read, & Priest, 2013). These self-understandings may then be interpreted and incorporated in the study (Marrow, 2005).

#### **4.8 Chapter Summary**

In this chapter, a thorough overview of the methodology was provided. The research rationale, aim, and research questions were discussed, followed by the research approach and designs used. The research participants and the sampling procedures for the quantitative and qualitative sections of the study were discussed. Data collection and analyses were explained. The chapter concluded with an explanation of the different ethical issues regarding the study and how the researcher ensured trustworthiness throughout the study.

## CHAPTER 5: PRESENTATION AND DISCUSSION OF RESULTS

The aim of this chapter is twofold. In the first part of the chapter, the results of both the quantitative and qualitative sections of this study are presented. This is followed by a discussion of these results in relation to previous studies and literature in the field.

### 5.1 Presentation of the Results

In the following section, the quantitative and qualitative results are presented. Firstly, the quantitative results pertaining to the descriptive and inferential statistics are presented. Secondly, the main themes and subthemes resulting from the qualitative section of the research are presented.

#### 5.1.1 Quantitative results

The aim of the quantitative section of the research was to investigate the following research question: Are there significant differences in adjustment between students from different generational groups during their first year?

Before the descriptive and inferential statistics are discussed, the reliability of the SACQ in this study is presented in Table 8. High alpha coefficients, and thus good reliability, were found.

**Table 8**

*Reliability of the SACQ in this Study*

Scale	N of items	Alpha coefficient
Academic subscale	24	0.824
Social subscale	20	0.852
Personal subscale	15	0.866
Total scale	59	0.912

Next, the descriptive statistics regarding adjustment in first-generation and non-first-generation students are presented. The section begins with a presentation of the descriptive statistics relating to the differences in adjustment between the different generational groups.

**5.1.1.1 Descriptive statistics regarding the adjustment in first-generation and non-first-generation students**

In Table 9, the minimum and maximum scores, the means, and standard deviations obtained by the participants in this sample on the adjustment scale (and its subscales) are summarised. Scores were calculated for the sample as a whole, as well as for the generational groups separately.

**Table 9**

*Minimum and Maximum Scores, Means, and Standard Deviations for Adjustment*

	<b>Group</b>	<b>Minimum</b>	<b>Maximum</b>	<b>Mean</b>	<b>SD</b>
<b>Academic adjustment (Scale range: 24-216)</b>	First generation	94	170	131.19	15.84
	Non-first generation	99	169	131.36	12.92
	Total sample	94	170	131.29	14.18
<b>Social adjustment (Scale range: 20-180)</b>	First generation	60	144	96.56	18.65
	Non-first generation	58	137	101.00	17.48
	Total sample	58	144	99.11	18.05
<b>Personal adjustment (Scale range: 15-135)</b>	First generation	25	122	73.54	19.45
	Non-first generation	27	104	64.54	21.29
	Total sample	25	122	68.38	20.93
<b>Total adjustment (Scale range: 59-531)</b>	First generation	231	370	301.29	32.40
	Non-first generation	217	373	296.90	36.17
	Total sample	217	373	298.77	34.54

For the academic adjustment subscale (which has a score range of 24 to 216, with a neutral score of 115) the participants obtained a mean score of 131.29 (SD = 14.18). This indicates that the participants had a tendency towards average and higher levels of academic adjustment, with the first-generation and non-first-generation students obtaining very similar scores.

For the social adjustment subscale (which has a score range of 20 to 180, with a neutral score of 100) the participants obtained a mean score of 99.11 (SD = 18.05). This indicates a tendency towards average levels of social adjustment. The non-first-generation students indicated marginally higher levels of social adjustment than the first-generation students did.

Regarding the personal adjustment subscale (which has a score range of 15 to 135, with a neutral score of 75), the participants obtained a mean score of 68.38 (SD = 20.93). This indicates a tendency towards average to lower levels of personal adjustment. Non-first-generation students showed lower levels of personal adjustment than first-generation students did.

With regard to total adjustment (which has a score range of 59 to 531, with a neutral score of 273) participants obtained a mean score of 298.77 (SD = 34.54). The participants had a tendency towards average levels of total adjustment. The first-generation students showed marginally higher levels of total adjustment than non-first-generation students did.

#### ***5.1.1.2 Inferential statistics regarding the differences in adjustment between the different generational groups***

The MANOVA that was performed to investigate the differences in adjustment in different generational groups indicated a statistically significant difference between first-generation and non-first generation students on the combined dependent variables, with  $F = 2.46$ ,  $p = 0.049$ , and partial eta squared = 0.078. When the results regarding the dependent variables were considered separately, using an ANOVA, the only difference to reach statistical significance was personal adjustment, with  $F = 5.73$ ,  $p = 0.018$ , and partial eta squared = 0.046. An inspection of the mean scores, as indicated in Table 9, shows that first-generation students ( $M = 73.54$ ,  $SD = 19.45$ ) adjusted better on a personal level than non-first generation students ( $M = 64.54$ ,  $SD = 21.29$ ).

### 5.1.2 Qualitative results

The aim of the qualitative section of the research was to investigate the following research question: What perceptions do students from different generational groups have regarding their adjustment during their first year?

By means of a thematic analysis of the six individual interviews, definite themes and subthemes were identified. The interviews with the first-generation and non-first-generation students were analysed separately. Since most of the themes that emerged were similar for the two generational groups, the themes are presented in an integrated manner. Different nuances that emerged from the two generational groups are highlighted where applicable. A summary of the main themes and subthemes is provided in Table 10.

**Table 10**

*Themes and Subthemes Regarding Adjustment during the First Year of Study*

<b>Main themes</b>	<b>Subthemes</b>
<b>Leaving home</b>	The distance from my family members Being away from my home environment
<b>The people in my life</b>	My parents and family Friends from school People in residence Classmates as acquaintances
<b>My academics</b>	
<b>Dealing with diversity</b>	
<b>Practicalities to deal with</b>	Campus life My finances
<b>My coping mechanisms</b>	Appreciating opportunity Taking responsibility My independence Finding unique ways to cope

A discussion of the main themes and subthemes identified during the individual interviews will now be presented. Quotations from the interviews are used to ensure the participants' original views and opinions are illustrated. Dotted lines are used where students spoke before or after the specific section in the quote. Information that may be missing is indicated by using dotted

lines within brackets (...), whereas brackets [...] are used when some information has been added to explain the context. At the end of each quotation, an indicator will be provided to specify the generational status of the participant, as well as the interview and paragraph from which the quotation was taken. The generational status of a participant is indicated by using an abbreviation for first-generation (FG) and non-first-generation (NFG). Any additional information that may indicate the identity of the participants has been removed.

### ***5.1.2.1 Leaving home***

One of the changes first-year students have to make is to move away from their home environment and their families. Most of the participants mentioned that they experienced some issues regarding leaving home. The two subthemes that were identified in this theme are ‘the distance from my family’ and ‘being away from my home’. The issues pertaining to these subthemes are discussed in the following section.

#### *a) The distance from my family members*

For some participants, it was difficult to move far away from their parents and their families. A participant mentioned, “*I live in Limpopo, so it’s rather far – 650 km from here. So it was a bit difficult to know that my parents weren’t immediately available*” (NFG participant, interview 1, par. 1.7). When asked what the most difficult part of leaving home was, a participant answered, “*...I could say my parents, my parents*” (NFG participant, interview 3, par. 3.12), and another participant mentioned, “*I am the only child living with both my parents at home. So having to leave that gap between us, I felt that something was missing (...)*” (NFG participant, interview 4, par. 4.30).

Participants also mentioned siblings that they missed while at university: “*Watching TV with them [parents] and the little stupid arguments, every single thing, oh ja, and my little sister too*” (NFG participant, interview 3, par. 3.12) and “*I miss my parents, and I miss my mom and my sister (...)*” (FG participant, interview 5, par. 5.18).

It is clear from these statements that participants were affected by the physical distance from their families, and the emotional impact it had on them. It was an adjustment to know that their parents were not readily available for them if they needed them. They also missed spending quality time with their parents and siblings.

b) *Being away from my home environment*

In addition to missing their family and parents because of the physical distance, some participants also missed their home environment. One participant said, “...*hate being here. I do not want to be here, I want to go back home (...)*” (NFG participant, interview 4, par. 4.18). A participant mentioned the difference between the home environment and the university environment and said, “*I think I felt the difference in a sense that, changing environments (...)*” (NFG participant, interview 4, par. 4.26). Another participant mentioned another difference between the home environment and the university environment, and stated, “*Being away from home and the crazy weather (...)*” (NFG participant, interview 2, par. 2.34). A participant described the home environment and the aspects she missed, and stated, “*But I just missed mom's home-cooked meals and just sleeping when I feel like sleeping (...)*” (NFG participant, interview 2, par. 2.10).

The participants indicated different factors that they missed from their home environment such as a home-cooked meal or their own beds. It is clear that the participants missed the environment and the feeling of belonging that accompanies it.

**5.1.2.2 *The people in my life***

The theme ‘the people in my life’ refers to the different people first-year students believed played a significant role in their social life on campus. This theme has four subthemes, namely parents and family, friends from school, classmates, people in residence, and people on campus.

a) *My parents and family*

The participants from the different generational groups had different opinions regarding the influence of their parents.

When asked which coping mechanisms were used during their first year, the following answer was given: “*Call a lot! (...)* *But a lot of calls to mom and granny. Ja, that really helps (...)*” (NFG participant, interview 2, par. 2.57). Another participant said, “*Ja, my mom has been giving me some support; she is with me every step of the way (...)*” (FG participant, interview 5, par. 5.46). When asked about the use of a specific coping mechanism, a student stated,

*“Sometimes I would call my parents and talk to them (...)”* (NFG participant, interview 3, par. 3.46).

The non-first-generation students mentioned that the fact that their parents had attended university played an important role in the manner in which they experienced their first year. A non-first-generation participant mentioned, *“... I knew what to expect. I am an only child, so I couldn't learn from brothers and sisters, but I learnt from my parent's frame of reference (...)”* (NFG participant, interview 1, par. 1.3). Another participant added, *“I had a distinction for the average of all my subjects, and again I think it was because my parents were at university”* (NFG participant, interview 1, par. 1.23). One participant said her parents had warned her about the possible pitfalls of university life, and said, *“Yes, they told me it's going to be crap and if I sleep I am going to fail (...)”* (NFG participant, interview 2, par. 2.46). The same student referred to the fact that parents understand the financial aspects better if they were at university: *“Yes! Because they understand the financial side of it that you still need money”* (NFG participant, interview 2, par. 2.44). The fact that non-first-generation students' parents play a significant role in their adjustment at university was illustrated further in the statement of one participant: *“I think I adjusted better because they did go to varsity”* (NFG participant, interview 3, par. 3.34), and another non-first-generation participant added, *“But still this is what you can do; get tutors, things are available for you. They know everything, they know where I should go if I need help. Unlike someone whose parents didn't go to varsity”* (NFG participant, interview 3, par. 3.36).

First-generation participants stated the following regarding their generational status and the influence thereof on their adjustment: *“I do not think it would have made any difference, really no”* (FG participant, interview 5, par. 5.44), and another said, *“I don't think so because I feel like it's your own experience (...) they can't prepare you for university because I feel like when you are here, you need to get your own perspective (...)”* (FG participant, interview 6, par. 30).

The first-generation participants' views regarding their parents' influence differed from those of non-first-generation participants. The first-generation participants felt that the fact that their parents had not been at university did not have a negative influence on their performance at university. They believed that university was a unique experience. Non-first-generation participants believed that their parents had prepared them sufficiently for the challenges they had to face during their first year at university.

b) *Friends from school*

During the interviews, it was found that participants found themselves in a better social position when they had friends from school who came to university with them. One participant stated, *“In first year, I came with [friend] because we are from the same high school and stuff. So I was with her all the time (...)”* (NFG participant, interview 4, par. 4.32). Another participant agreed by stating, *“I think it is because when I came here, already two people from my previous school were already here (...)”* (NFG participant, interview 2, par. 2.24), while another participant mentioned, *“(...) and then many people come here with friends from school which is also easier (...)”* (NFG participant, interview 1, par. 1.11). One of the participants came to university with her boyfriend from home and stated how it helped her adjustment during her first year: *“It helps when you have someone to shout at and vent sort of...and he helps a little here and there (...)”* (NFG participant, interview 2, par. 2.71). It is clear from these statements that the participants considered the first year to be easier because some friends from school also attended the same university.

c) *People in residence*

For most of the participants, being in a residence and being surrounded by students who were in the same situation helped them much with adjustment. A participant stated, *“(...) the res [residence/hostel] helped me a lot because you know there is a roommate readily and you know you have a network of support (...)”* (NFG participant, interview 1, par. 1.7), and another said, *“So the whole time, I had someone to go to – even if it was just the HK [House Committee]. And then with your room mates, you make friends”* (NFG participant, interview 1, par. 1.11). A first-generation participant said, *“(...) like getting an academic mom [academic mentor programme in residence/hostel] from res”* (FG participant, interview 5, par. 5.4), and a non-first-generation participant said, *“Emotional adjustment was good, the reason being that the HK helped us so well (...)”* (NFG participant, interview 1, par. 1.17). Additional support systems in residences helped the participants to adjust during their first year of university, despite their generational status.

d) *Classmates as acquaintances*

Throughout the interviews, it appeared as though the participants felt that it was more difficult to make friends in the class setting, than in residence. A participant stated, *“I didn’t make friends in class very extensively (...)”* (NFG participant, interview 1, par. 1.13). Another

participant mentioned the following when asked how they experienced making friends at university: *“In class, yes. Because in class I do not talk, I am there for class, not socialising (...)”* (NFG participant, interview 2, par. 2.26). Students indicated that they mainly socialised only with classmates when it was necessary. A participant stated, *“(...) I don’t have friends in classes. I go to classes alone, ja. I only associate with them during group assignments”* (NFG participant, interview 4, par. 4.36), and another said, *“(...) but outside of class, if we have projects or group discussions – I will participate”* (NFG participant, interview 2, par. 2.26). It is clear that participants do not consider the people with whom they attend class as friends, but rather as acquaintances.

### **5.1.2.3 My academics**

Academics were one of the main themes that emerged during the analysis. Most of the participants experienced a substantial difference between high school academics and higher education academics. The academic environment to which the participants were exposed at university differed much from their academic experience at high school. A participant stated, *“(...) my whole of first year was...uhm very challenging for me in terms of academics because (...) it is quite different from what we are used to in high school”* (FG participant, interview 5, par. 5.4). Another participant said, *“They do not spoon-feed you. No, they give you your work and they give you an outline, that’s basically just it. The rest is in your hands”* (NFG participant, interview 3, par. 3.4). Another agreed and said, *“I started out on a very bad patch; it was not well. You are adjusting from high school, spoon feeding and everything”* (NFG participant, interview 4, par. 4.46). The participants believed that the university environment does not offer the same level of assistance as the high school environment does.

The participants were of the opinion that the amount of work at university differs from that at high school. A participant mentioned, *“I think it was the workload, the workload was a huge challenge because it is way more than matric (...)”* (FG participant, interview 6, par. 6.6). Another participant said, *“Academics were killing me, I did not understand a thing, I got lost. Everything was just too fast for me”* (NFG participant, interview 4, par. 4.56).

Another participant mentioned that the size of the classes was also an issue and said, *“I feel like with lecturers it’s not like they know you. (...) And it’s understandable considering that in a lecture you are like 800/600 (...)”* (NFG participant, interview 3, par. 3.8). Another participant agreed and said, *“with classes (...) that was very challenging because then it is huge*

*classes, like we in matric I think you are 30 people in a class (...)*” (FG participant, interview 6, par. 6.12).

Participants from both generational groups struggled with academic adjustment and were of the opinion that the workload, the manner in which the work is presented, the size of the classes and campus, and the academic responsibility differ substantially between university and high school.

#### **5.1.2.4 Dealing with diversity**

Participants indicated that they had had various experiences regarding diversity during their first year of study, specifically with regard to language and cultural differences.

One participant mentioned that the language differences in all areas of the university influenced her adjustment: “(...) *I mean its fine when you adjusted properly (...) it’s just that the languages are a bit different (...)*” (NFG participant, interview 2, par. 2.6). Some participants mentioned that cultural differences were also an issue in their adjustment. One participant stated, “(...) *difficulties were when it came to diversity, diversity was the biggest problem*” (NFG participant, interview 4, par. 4.4). One participant mentioned that race was an adjustment issue and said, “*Okay, the school that I was in (...) it was mostly black people (...) and when I got here I was mostly surrounded by white people, so it is hard to like make friends for me (...)*” (FG participant, interview 5, par. 5.20), and another said, “(...) *because you can actually feel it when you are here, like okay, there is just that separation thing (...) so black people stick with black people and white people stick with white people (...)*” (FG participant, interview 5, par. 5.24). Regarding race, a participant stated, “(...) *but we just couldn’t find ourselves on the same level as other races (...)*” (NFG participant, interview 4, par. 4.4). Some participants noticed the diverse range of culture differences among students on campus. They were of the opinion that the big culture difference is an important part of first-year adjustment, since they have to adjust to having students from different cultures in class and in their residence.

### 5.1.2.5 *Practical challenges to deal with*

During the interviews, a prominent theme was the different practicalities the participants had to learn to deal with since starting university. These issues were themed into ‘campus life’ and ‘my finances’.

#### a) *Campus life*

According to the participants, campus life was a new and different experience for them. One participant stated, “*Many people come here and can’t believe everything is so big. And many of the first years – the black first years/first-generation-students – didn’t know what to expect (...)*” (NFG participant, interview 1, par. 1.27), and another said, “*Campus felt like it was like a hundred kilometres walking from the admin to...yho (...) and everyone was looking at me funny like why are you lost?*” (NFG participant, interview 2, par. 2.63).

There are different activities on campus to improve adjustment for students. One student mentioned the campus activities that formed part of campus life and said, “*I did stage door in my first year – that first-year concert that we all have to do (...)*” (NFG participant, interview 1, par. 1.19), but another participant found this a little difficult and said, “*Because I had res activities and I had academics this side, so there was kind of like conflict*” (NFG participant, interview 4, par. 4.22).

Participants mentioned that the aspects of campus life that were new and time consuming could be overwhelming for first-year students. However, the same activities that could be considered as time consuming and overwhelming were the same activities that facilitated students’ adjustment during their first year at university.

#### b) *My finances*

Most participants found their new financial responsibility to be a challenge. One participant mentioned, “*Well, financially I haven’t adjusted because I call my parents all of the time, like: ‘I need this, I need that’*” (NFG participant, interview 4, par. 4.40), and another said, “*But now that you are here you have to care for yourselves. You are living on a salary, a stable month to month*” (NFG participant, interview 3, par. 3.42). Some participants had managed to manage their financial challenges. A participant said, “*(...) I mean financially wise I have learnt to like control my spending and like time it sort of towards the end of the month (...)*” (NFG

participant, interview 2, par. 2.12), and another said, “*My allowance, I only get a specific amount from my parents (...) But like the money, I get by*” (FG participant, interview 6, par. 6.26).

#### **5.1.2.6 My coping mechanisms**

One of the themes that emerged was the coping mechanisms the participants used during their first year of university. These coping mechanisms could be divided into four subthemes, namely ‘appreciating opportunity’, ‘my independence’, ‘taking responsibility’, and ‘finding unique ways of coping’.

##### *a) Appreciating opportunity*

Participants were of the opinion that their parents motivated them during university. One participant stated, “*My dad also said he only pays once and then we pay ourselves. So this was definitely a good motivational factor*” (NFG participant, interview 1, par. 1.29).

It made them realise that they had an opportunity to obtain a degree, an opportunity that other people might not have. A first-generation student stated, “*(...) I feel like I’ve got the opportunity to come and I’m grateful because they [parents] didn’t have the opportunity to come, so it actually makes me appreciate it a bit more (...) and study more because this is my chance to get a degree (...)*” (FG participant, interview 6, par. 6.32).

Thus, it is clear that students, whether they were first-generation or non-first-generation students, were of the opinion that their parents gave them the opportunity to study, and that they should make most of the opportunity.

##### *b) Taking responsibility*

Most of the participants realised that a level of responsibility is required from a first-year student. One participant mentioned, “*I would easily have thought ‘the classes are easy; I can catch up by myself later or go to class less often (...)*” (NFG participant, interview 1, par. 1.25) [She explained that her father had prepared her for her responsibility as a student to attend classes regularly and do the work assigned for them]. Another participant said, “*I just start in time, because I tend to stress easily (...) even if I don’t do well then, I am fine. Then I know I did my part*” (NFG participant, interview 1, par. 1.32). Students learnt how to manage the new academic responsibility they faced by making use of time management skills.

c) *My independence*

With regard to their living situation, the participants experienced a new sense of independence when they came to university. A participant said, “*The biggest adjustment was rather preparing food for yourself, doing your own laundry (...)*” (NFG participant, interview 1, par. 1.3). Another participant mentioned independence in terms of their classes and said, “*So it is very independent, you have to decide on your own if you are going to class or you need to study*” (FG participant, interview 6, par. 6.12). However, most of them agreed that becoming independent was part of university life. One participant said, “*(...) at some point I also need to start acting independently and stop with the mentality of thinking I am independent without showing it*” (NFG participant, interview 3, par. 3.48). When asked what the greatest challenge of moving away from home was, a participant stated, “*I think it is becoming more independent, because you do not see your parents everyday any more* (FG participant, interview 6, par. 6.6).

d) *Finding unique ways of coping*

One of the participants mentioned that support facilities on the campus played a role in acquiring coping mechanisms and said, “*(...) when I couldn't cope I went to the psychologist here on campus and they helped me with like time management (...) a few self-esteem classes and learnt how to make friends and stuff (...)*” (FG participant, interview 5, par. 5.67). This participant stated how important the campus facilities were during the first year, and that acquiring time management skills, as well as self-esteem classes, assisted the process of coping in the first year.

Some of the participants mentioned that they had found their own unique ways of coping. One of the participants stated, “*(...) I am just going to focus on what I have to do (...) I am not going to let that affect me (...)*” (NFG participant, interview 4, par. 4.50). It is clear that this participant relied on self-motivation as a coping mechanism.

One of the participants said, “*And then every time I missed home, I would go to the mall, buy something to make me happy (...) maybe listen to music and dance around (...)*” (NFG participant, interview 3, par. 3.42). For this participant, relaxation methods were used as a coping mechanism for the different challenges faced during the first year at university.

Another participant mentioned faith: “*(...) my faith helps my coping a lot because I turn to God if something is challenging (...)*” (FG participant, interview 6, par. 6.42). This participant

showed the importance of faith to assist with the different issues faced during the first year at university.

From the statements above, it is clear that participants have different manners in which they cope with the challenges they face during their first year at university. First-generation and non-first-generation students need coping mechanisms for these issues.

### **5.1.3 Summary of the quantitative and qualitative results**

First-generation and non-first-generation participants reported relatively equal levels of adjustment. However, the generational groups differ significantly regarding personal adjustment, with first-generation participants having a higher level of personal adjustment than non-first-generation participants have.

From the qualitative analysis, mostly similar themes emerged for first-generation and non-first-generation students. All participants were affected by the distance from their home environment and the move away from their home environment. Both generational groups indicated the important influence of their parents in their first year at university. The non-first-generation participants were of the opinion that their parents' knowledge and experience of attending a university facilitated their adjustment, by preparing them for the possible experiences they might encounter, possible pitfalls regarding time management, the new financial responsibilities, and where they should go if they needed assistance. In contrast to this, first-generation participants were of the opinion that the university experience was unique for everyone and that their parents' previous experiences would not have influenced their experiences and adjustment. Both generation groups mentioned that having friends from school and being in a residence aided their social and academic adjustment. In contrast to this, participants did not forge meaningful relationships with their class peers and regarded them merely as acquaintances.

Both generation groups agreed that the academic environment posed various challenges in the form of the amount of work, the fast pace, the large and impersonal classes, and the fact that the lecturers did not assist them as much as their teachers at school did. Both generational groups indicated that their academic responsibility at university had changed significantly from that at high school. Participants found various coping mechanisms to assist with adjusting to the new environment, such as accepting personal responsibility, developing a sense of independence, practising faith, self-motivation, and relaxation activities.

## **5.2 Discussion of the Results**

Next, the results are discussed and compared with existing literature and previous research studies regarding adjustment and generational status. These results are discussed as they relate to students' academic adjustment, social adjustment, and personal adjustment.

### **5.2.1 Academic adjustment**

The quantitative results of this study indicate that both generational groups had relatively equal levels of academic adjustment. This contradicts previous research findings; for example, Jean (2010) found that first-generation students believed that they were not able to adjust as successfully to the new academic demands as their non-first-generation counterparts were. Ward et al. (2012) state that first-generation students are not as prepared academically as non-first-generation students are, and that first-generation students are considered to have insufficient knowledge regarding the learning programmes a university offers. These findings were not confirmed in this study.

In the qualitative section of the study, all the participants mentioned that the level, amount, and expectations with regard to academic work at university differ significantly from those at high school and that they were experiencing greater responsibility toward their academic workload. According to Peterson, Louw, and Dumont (2009), struggling to manage the academic workload at university has a negative effect on the academic adjustment of students. The perceived difficulty of the academic workload influences the amount of effort students put into their work (Bitzer & Troskie-De Bruin, 2004; Peterson et al., 2009). Reason, Terenzini, and Domingo (2006) suggest that the academic foundation formed by students in their first year of university will determine their academic success further on throughout their studies.

Tinto (1975) suggests that individuals' academic integration at university depends not only on their academic performance, but also on their intellectual development throughout university. Students are now in a position where they develop their intellectual and cognitive skills further (Reason et al., 2006) and use formal-operational thought (Sigelman & Rider, 2014). How students cope with the academic demands they face at university will determine the level of their academic adjustment (Baker & Syrik, 1989).

In the current study, the participants pointed out that the university environment expects high levels of academic independence and does not offer the same level of assistance as at high

school. Vygotsky mentioned that social interaction with authorities who have a higher level of intellectual development contributes to individuals' intellectual development (Harrington, 2015). This may be a reason why students struggle to adjust to the academic environment, since they do not form relationships with lecturers and faculty members to assist in their cognitive and academic development. Regarding their academic adjustment, participants experienced large classrooms as impersonal and also mentioned that the lecturers do not know them personally.

Reason et al. (2006) found that students who believe that they receive academic support from their university, faculty, and lecturers show a higher level of academic competence than their peers without support at universities do.

### **5.2.2 Social adjustment**

Both generational groups were very outspoken about the important role that various people played in their social adjustment. The important role of social support is emphasised in many theories and research studies. An adequate level of social support is necessary for students to transfer from high school to university successfully (Baker & Syrik, 1989; Sommer, 2013). Sommer (2013) writes that students who struggle to form the necessary social relationships and interactions at university lack the support they need in the new environment. Students have the opportunity in their new university environment to build and maintain different social relationships with friends, classmates, lecturers, and faculty members. The level of social integration will influence the overall adjustment of students to their new environment.

Participants highlighted family support, friendships from school, living in a residence, and being in a mentor programme as valuable aspects in students' social and academic adjustment. Social interactions with various individuals in the university environment allow students to adjust on various levels. Tinto (1975) states that social integration does not depend only on the successful adjustment to and integration with the social systems of university as a whole, but rather the successful development of friendships and integrating socially with some part of the social system. Astin also indicates that the higher the level of students' involvement in social aspects is, the higher their level of adjustment will be (Rust et al., 2007).

The participants mentioned that classmates did not significantly influence their social adjustment and were regarded as acquaintances that were available for academic projects rather than for social gatherings. Tinto (1975) also mentions that the level of social interaction

between individuals and semi-formal extracurricular activities play a role in students' level of social integration.

Participants from the first-generation and non-first-generation groups experienced different types of support by their parents. While non-first-generation students mentioned that their parents assisted them in preparing for university life, possible pitfalls, and the new level of responsibility, first-generation student expressed appreciation for the fact that their parents offered them this opportunity which they (the parents) did not have.

### **5.2.3 Personal adjustment**

It was found that first-generation students showed a higher level of personal adjustment than non-first-generation students did.

When the qualitative results were analysed, it was found that students from both generational groups were affected emotionally by being away from home. Participants had to adjust to their new level of responsibility and cope on their own because their parents were not available. Both generation groups indicated that they experienced a sense of independence during their first year at university. This concurs with what Chickering describes as the acquisition of cognitive and psychosocial skills when students encounter the various living environments, diversity, and academic challenges (Long, 2012). Thus, as students learn how to handle challenges, they learn how to gain autonomy.

In facing various academic and social challenges, participants developed various coping mechanisms, Baker and Syrik (1989) write that personal-emotional adjustment includes the manner in which students cope with personal stress and anxiety. In a study done by Abdullah et al. (2009), it was found that students experienced high levels of anxiety and negative experiences at university. Psychosocial challenges students experience during their first year give them the opportunity to grow on a psychosocial level. It is clear from Erikson's (1980) and Chickering's (1969, 2005) theories that students develop their identities as well as intimate relationships. Sommer (2013) mentions that different psychosocial factors influence the academic and social adjustment of students in their university environment.

## **5.3 Chapter Summary**

In this chapter, the quantitative and qualitative results of the study were presented and discussed. The quantitative results included descriptive statistics regarding the participants' levels of adjustment and the difference between first-generation and non-first-generation students. The qualitative results were discussed in terms of the main themes that emerged during the semi-structured interviews. This was followed by comparing the quantitative and qualitative results with literature and findings of previous studies in the field.

## **CHAPTER 6: DISCUSSION OF THE MOST SIGNIFICANT FINDINGS, LIMITATIONS, AND RECOMMENDATIONS**

In this chapter, the most significant quantitative and qualitative findings of the research study are summarised. Secondly, the limitations of the present study are presented. Finally, recommendations for future studies are made.

### **6.1 Discussion of the Most Significant Findings**

In summarising the findings of the present study, some key findings can be highlighted.

It was found that first-generation students have significantly higher levels of personal-emotional adjustment than non-first-generation students do. This is in contrast to previous research that mostly associates lower levels of adjustment with first-generation students. A possible explanation for this finding may be that the lack of parental support first-generation student experience may prompt them to take more personal responsibility for their own well-being.

In contrast to previous research in the field, much similarity between the first-generation and non-first-generation students was observed with regard to most of the other domains of adjustment and students' qualitative perceptions of their adjustment. It may be possible that not only first-generation students, but also most South African first-year students (despite their generational status) feel underprepared for the academic and social challenges at university. This may be attributed to the increasing academic gap between high school and the higher education environment or to the move from the insular communities students come from to the highly diverse and transformed university environment. The impact of inadequate schooling and academic preparation on students' academic adjustment should be kept in account. Students who do not receive the necessary financial support from their parents, usually have to find a part time job to finance their studies. This will limit their opportunities for socialising with students.

Participants in this study reported a multitude of challenges regarding their academic and social integration. Although participants obtained relatively moderate scores on the SACQ, they were able to articulate various relevant challenges and difficulties in adjusting to first-year university life. As would be expected from a developmental perspective, these environmental circumstances challenged students to develop on cognitive and interpersonal levels. This

includes finding their own responsibility and voice in their academics, as well as developing a personal identity, mature interpersonal skills, and a sense of autonomy. Still, when students struggle to live up to the expectations of higher education, institutions can play a great role in scaffolding students towards their optimal level of development. Considering the challenges students articulated in this study, these interventions might include orientation programmes with regard to the expectations of higher education, time management programmes, activities to facilitate class peers to cooperate, and mentor programmes especially for students who are not living on campus.

## **6.2 Limitations of the Present Study**

In the present study are various limitations that should be considered.

The first limitation relates to the sample. For the quantitative section of the study, a non-probability convenience sample of 122 students participated; therefore, the results obtained indicate the adjustment of only a small group of first-year students at one specific university. A larger sample group recruited through probability sampling would have provided a sample that is more representative and results that are more generalisable. While six individual interviews might be regarded as enough, the richness and depth of data could have been improved by not just including more participants, but also a more equal representation of respondents since only two first generation students were interviewed. Furthermore, focus group discussions with students of both generation groups could also have added value..

Data collection was done in Afrikaans and English, the two official languages of instruction at the UFS. Many of the participants in this study do not have Afrikaans or English as their mother tongue. This might have limited their ability to comprehend the questions or express themselves fully. Although the researcher was sensitive to language barriers and made an effort to explain concepts and ask for clarification where necessary, it is acknowledged that the use of a second or third language in research is a complex issue.

Both the quantitative and qualitative forms of data collection were self-report methods and expected from students to reflect (retrospectively) on their adjustment during the first year. Some participants' views might have been skewed by their current feelings and experiences, limiting their ability to recollect the events and experiences of the first semester in their first year.

### **6.3 Implications and Recommendations for Future Studies**

The findings in this study can provide guidelines for higher education institutions as to how these institutions can support students towards optimal adjustment. As mentioned, in light of the challenges participants in this study mentioned, more attention and focus can be placed on orientation programmes, time management programmes, activities to facilitate class peers to cooperate, and mentor programmes.

Several recommendations can be considered for future studies regarding adjustment in first-year students. Firstly, language barriers can be addressed by translating the questionnaires into the languages of the participants and conducting interviews either in the participants' mother tongue or by using a professional translator. Secondly, in addition to investigating the differences in generational groups, the difference between the adjustment of male and female students can also be investigated in future studies. Furthermore, other key factors such as the role of the quality of high school education (school quantile status), as well as the availability of financial support should be considered for future studies. Students' academic achievement can also be included and compared with regard to their academic preparation and academic adjustment.

Lastly, larger and more representative sample groups from more than one university can be considered in future studies.

### **6.4 Conclusion**

This chapter concluded this research study by providing an overview of the most significant findings, the limitations of the study, and recommendations for future studies.

## REFERENCES

- Abdullah, M. C., Elias, H., Mahyuddin, R., & Uli, J. (2009). Adjustment amongst first-year students in a Malaysian university. *European Journal of Social Sciences*, 8(3), 496-505. Retrieved from <http://www.docstoc.com/docs/72452837/Adjustment-Amongst-First-Year-Students-in-a-Malaysian-University>
- Allan, A. (2011). *Law and ethics in psychology: An international perspective*. Somerset West, SA: Inter-Ed.
- Al-Qaisy, M. (2010). Adjustment of college freshmen: The importance of gender and the place of residence. *International Journal of Psychological Studies*, 2(1), 142-150. Retrieved from <http://0search.ebscohost.com.wagtail.ufs.ac.za/login.aspx?direct=true&db=a9h&AN=51502856&site=ehost-live>
- Altbach, P. G., Arnold, K., & King, I. C. (2014). *College student development and academic life: Psychological, intellectual, social and moral issues*. Retrieved from [https://books.google.co.za/books?id=WtrgAwAAQBAJ&dq=perry%27s+intellectual+scheme&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=WtrgAwAAQBAJ&dq=perry%27s+intellectual+scheme&source=gbs_navlinks_s)
- Andreatta, B. (2011). *Navigating the research university: A guide for first-year students*. Retrieved from [https://books.google.co.za/books?id=mhNBhfR20U0C&dq=arthur+chickering%27s+seven+vectors&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=mhNBhfR20U0C&dq=arthur+chickering%27s+seven+vectors&source=gbs_navlinks_s)
- Arnett, J. J. (2000a). Emerging adulthood: A theory of development from the late teen through the twenties. *American Psychologist*, 55(5), 469-480. Retrieved from [http://www.jeffreyarnett.com/articles/ARNETT\\_Emerging\\_Adulthood\\_theory.pdf](http://www.jeffreyarnett.com/articles/ARNETT_Emerging_Adulthood_theory.pdf)
- Arnett, J. J. (2000b). High hopes in a grim world: Emerging adults' views of their futures and "generation X". *Youth & Society*, 31(3), 267-286. Retrieved from [www.jeffreyarnett.com/articles/ARNETT\\_high\\_hopes\\_in\\_a\\_grim\\_world.pdf](http://www.jeffreyarnett.com/articles/ARNETT_high_hopes_in_a_grim_world.pdf)
- Arnett, J. J. (2004). *Emerging adulthood: The winding road from late teens through the twenties*. Oxford, UK: Oxford University Press. Retrieved from <http://www.jeffreyarnett.com/windingroad.htm>

- Arnett, J. J. (2010). *Adolescence and emerging adulthood: A cultural approach*. Upper Saddle River, NJ: Pearson Education.
- Arnett, J. J. (2015). *Emerging adulthood: The winding road through the late teens through the twenties*. Retrieved from [https://books.google.co.za/books?id=MUtRBAAAQBAJ&dq=students+as+emerging+adults&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=MUtRBAAAQBAJ&dq=students+as+emerging+adults&source=gbs_navlinks_s)
- Astin, A. W. (1984). Student involvement: A developmental theory for higher education. *Journal of College Student Development*, 40(5), 518-529. Retrieved from <https://www.middlesex.mass.edu/ace/downloads/astininv.pdf>
- Babbie, E. (2007). *The practice of social research*. Belmont, CA: Thomson Wadsworth Learning.
- Baker, R. W., & Siryk, B. (1984). Measuring adjustment to college. *Journal of Counseling Psychology*, 31(2), 179-189. Retrieved from <http://psycnet.apa.org/psycinfo/1984-21813-001>
- Baker, R. W., & Siryk, B. (1986). Exploratory intervention with a scale measuring adjustment to college. *Journal of Counselling Psychology*, 33(1), 31-38. Retrieved from <http://psycnet.apa.org/psycinfo/1986-15882-001>
- Baker, R. W., & Siryk, B. (1989). *Student adaptation to college questionnaire (SACQ)*. Los Angeles, CA: Western Psychological Services. Retrieved from <http://portal.wpspublish.com/pdf/sacq.pdf>
- Barry, L. M., Hudley, C., Kelly, M., & Cho, S. (2009). Differences in self-reported disclosure of college experiences by first-generation college student status. *Adolescence*, 44(173), 55-68. Retrieved from <http://www.ncbi.nlm.nih.gov/pubmed/19435167>
- Baxter Magolda, M. B. (1992). *Knowing and reasoning in college: Gender related patterns in students' intellectual development*. San Francisco, CA: Jossey-Bass.
- Baxter Magolda, M. B. (2007). Self-authorship: The foundation for twenty-first-century education. *New Directions for Teaching and Learning*, (109), 69-83. doi:10.1002/tl.266

- Baxter Magolda, M. B. (2012). Building learning partnerships. *Change: The Magazine of Higher Learning*, 44(1), 32-38. Retrieved from <http://dx.doi.org/10.1080/00091383.2012.636002>
- Baxter, P., & Jack, S. (2008). Qualitative case study methodology: Study design and implementation for novice researchers. *The Qualitative Report*, 13(4), 544-. Retrieved from <http://www.nova.edu/ssss/QR/QR13-4/baxter.pdf>
- Bennett, G., & Jessani, N. (2011). *The knowledge translation toolkit: Bridging the know-do gap: A resource for researchers*. Retrieved from <http://books.google.co.za/books?id=jJPxr2awYiIC&pg=PA229&dq=why+can+quantitative+data+be+generalized+pdf&hl=en&sa=X&ei=ONuKU8-fMer07Ab9hoDQDA&ved=0CDQQ6AEwAQ#v=onepage&q=why%20can%20quantitative%20data%20be%20generalized%20pdf&f=false>
- Benson, P. L., Scales, P. C., Hawkins, J. D., Oesterle, S., & Hill, K. G. (2004). *Executive summary: Successful young adult development*. Seattle, WA: University of Washington. Retrieved from <https://docs.gatesfoundation.org/Documents/SuccessfulDevelopment.pdf>
- Berk, L. E. (2007). *Development through the lifespan* (4th ed.). Retrieved from <http://catalogue.pearsoned.co.uk/samplechapter/0205491251.pdf>
- Beyers, W., & Goossens, L. (2002). Concurrent and predictive validity of the student adaptation to college questionnaire in a sample of European freshman students. *Educational and Psychological Measurement*, 62, 527-538. doi:10.1177/00164402062003009
- Bitzer, E., & Troskie-De Bruin, C. (2004). The effect of factors related to prior schooling on student persistence in higher education. *South African Journal of Education*, 24(2), 119-125. Retrieved from <http://academic.sun.ac.za/chae/bitzer/SAJE.2004.Factors%20related%20to%20prior%20schooling.pdf>
- Bjorklund, D. F., & Blasi, C. H. (2011). *Child and adolescent development: An integrated approach*. Retrieved from [https://books.google.co.za/books?id=wYpIHc\\_aPbcC&dq=how+college+students+use+formal-operational&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=wYpIHc_aPbcC&dq=how+college+students+use+formal-operational&source=gbs_navlinks_s)
- Blake, B., & Pope, T. (2008). Developmental psychology: Incorporating Piaget's and Vygotsky's theories in classrooms. *Journal of Cross-Disciplinary Perspectives in*

*Education*, 1(1), 59-67. Retrieved from [http://people.wm.edu/~mxtsch/Teaching/JCPE/Volume1/JCPE\\_2008-01-09.pdf](http://people.wm.edu/~mxtsch/Teaching/JCPE/Volume1/JCPE_2008-01-09.pdf)

Blimling, G. S. (2010). *The resident assistant: Applications and strategies for working with college students in residence halls*. Retrieved from <https://books.google.co.za/books?id=tGniRAAACAAJ&dq=blimling+2010&hl=en&sa=X&ved=0ahUKEwjL1ZG7IKXNAhULdT4KHRbjBSUQ6AEIGjAA>

Blimling, G. S. (2013). New dimensions to psychosocial development in traditionally aged college students. *About Campus*, 18(5), 10-16. doi:10.1002/abc.21132

Blimling, G. S. (2015). *Student learning in college residence halls: What works, what doesn't, and why*. Retrieved from [https://books.google.co.za/books?id=a7RYBQAAQBAJ&dq=social+challenges+for+first+generation+college+students&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=a7RYBQAAQBAJ&dq=social+challenges+for+first+generation+college+students&source=gbs_navlinks_s)

Bojuwoye, O. (2002). Stressful experiences of first-year students of selected universities in South Africa. *Counselling Psychology Quarterly*, 15(3), 277-290. Retrieved from <http://dx.doi.org/10.1080/09515070210143480>

Bojuwoye, O. (2010). Stressful experiences of first-year students of selected universities in South Africa. *Counselling Psychology Quarterly*, 15(3), 277-290. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/09515070210143480>

Bornstein, M. H., Vandell, D. L., & Rook, K. S. (2010). *Lifespan development: Infancy through adulthood*. Retrieved from [http://books.google.co.za/books?id=Rayh9SosAIMC&pg=RA1-PA39&lpg=RA1-PA39&dq=Labouvie-Vief+2006+physical+domain+of+development&source=bl&ots=2NH0kr\\_vf5&sig=-UiVP9HJtvqiYD7hgNsG5RdzeCg&hl=en&sa=X&ei=uth1VOfaC8jzas-ngOAB&ved=0CCYQ6AEwAQ#v=onepage&q=physical%20domain&f=false](http://books.google.co.za/books?id=Rayh9SosAIMC&pg=RA1-PA39&lpg=RA1-PA39&dq=Labouvie-Vief+2006+physical+domain+of+development&source=bl&ots=2NH0kr_vf5&sig=-UiVP9HJtvqiYD7hgNsG5RdzeCg&hl=en&sa=X&ei=uth1VOfaC8jzas-ngOAB&ved=0CCYQ6AEwAQ#v=onepage&q=physical%20domain&f=false)

Boyce, C., & Neala, P. (2006). *Conducting in-depth interviews: A guide for designing and conducting in-depth interviews for evaluation input*. Retrieved from [http://www2.pathfinder.org/site/DocServer/m\\_e\\_tool\\_series\\_indepth\\_interviews.pdf](http://www2.pathfinder.org/site/DocServer/m_e_tool_series_indepth_interviews.pdf)

- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. Retrieved from [http://eprints.uwe.ac.uk/11735/2/thematic\\_analysis\\_revised\\_-\\_final.pdf](http://eprints.uwe.ac.uk/11735/2/thematic_analysis_revised_-_final.pdf)
- Braxton, J. M. (2000). *Reworking the student departure puzzle*. Retrieved from [https://books.google.co.za/books?id=WF8itWof7aIC&dq=tinto+theory+of+departure&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=WF8itWof7aIC&dq=tinto+theory+of+departure&source=gbs_navlinks_s)
- Braxton, J. M., Hirschy, A. S., & McClendon, S. A. (2011). *Understanding and reducing college student departure*. Retrieved from [https://books.google.co.za/books?id=efTzVrjFf3wC&dq=Braxton,+Hirschy+%26+McClendon,+2011&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=efTzVrjFf3wC&dq=Braxton,+Hirschy+%26+McClendon,+2011&source=gbs_navlinks_s)
- Brook, H., Fergie, D., Maeorg, M., & Michell, D. (2014). Universities in transition: Foregrounding social contexts of knowledge in the first-year experience. Retrieved from [https://books.google.co.za/books?id=Ip3dBAAAQBAJ&dq=challenging+nature+of+first+year+at+university&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=Ip3dBAAAQBAJ&dq=challenging+nature+of+first+year+at+university&source=gbs_navlinks_s)
- Brown, N. (2008). *Predicting college adjustment: The contribution of generation status and parental attachment* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database (UMI No. 333297).
- Bustos, A. S., Malolos, N. I., Ramirez, A. E., Ramos, E. C., & Bustos-Oros, A. (1999). *Introduction to psychology*. Quezan City, Phillippines: Katha. Retrieved from [https://books.google.co.za/books?id=hNaQjulbwWgC&dq=types+of+adjustment+mechanism+in+psychology&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=hNaQjulbwWgC&dq=types+of+adjustment+mechanism+in+psychology&source=gbs_navlinks_s)
- Cardwell, M., & Flanagan, C. (2005). *Psychology AS*. Retrieved from [http://books.google.co.za/books?id=1giK8vyEz\\_cC&pg=PA191&dq=informed+consent+in+psychological+research&hl=en&sa=X&ei=0qgkU8GxLsTRhAfHnIGADg&ved=0CCsQ6AEwAA#v=onepage&q=informed%20consent%20in%20psychological%20research&f=false](http://books.google.co.za/books?id=1giK8vyEz_cC&pg=PA191&dq=informed+consent+in+psychological+research&hl=en&sa=X&ei=0qgkU8GxLsTRhAfHnIGADg&ved=0CCsQ6AEwAA#v=onepage&q=informed%20consent%20in%20psychological%20research&f=false)
- Carini, R. M., Kuh, G. D., & Klein, S. P. (2006). Student engagement and student learning: Testing the linkages. *Research in Higher Education*, 47(1), 1-32. doi:10.1007/s11162-005-8150-9

- Carman, M. J. (2008). *Exploration of dimensions of emerging adults' perceptions of the transition to adulthood*. Retrieved from <https://books.google.co.za/books?id=nXm10HtNCCEC&pg=PA37&lpg=PA37&dq=age+of+possibility+of+emerging+adulthood&source=bl&ots=8EgakkLPN1&sig=YVA-GHrQbph4zpgs1A3HCL2gpAY&hl=en&sa=X&ei=IBXGVM-bDarA7AaH9IGoDg&ved=0CEsQ6AEwCA#v=onepage&q=age%20of%20possibility%20of%20emerging%20adulthood&f=false>
- Chickering, A. W., McDowell, J., & Campagna, D. (1969). Institutional differences and student development. *Journal of Educational Psychology*, 60(4), 316-326. Retrieved from <http://psycnet.apa.org/psycinfo/1969-16308-001>
- Chickering, A. W., & Reisser, L. (2005). The seven vectors. In M. E. Wilson, & L. E. Wolf-Wendel(Eds.), *College student development theory* (pp. 181-190). Boston, MA: Pearson.
- Clairborne, L. B., & Drewery, W. (2010). *Human development: Family, place and culture*. Maidenhead, UK: McGraw-Hill.
- Cliniciu, A. I. (2012). Adaptation and stress for the first-year university students. *Procedia – Social and Behavioral Sciences*, 78, 718-722. doi:10.1016/j.sbspro.2013.04.382
- Cohen, L., Pooley, J. A., Clarke-Stewart, A., Penner, L. A., Roy, E. J., Bernstein, D. A., ... Cranney, J. (2013). *Psychology: An international discipline in context: Australian and New Zealand edition*. Retrieved from [https://books.google.co.za/books?id=EJKpBQAAQBAJ&dq=erikson%27s+theory+of+psychosocial+development+pdf&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=EJKpBQAAQBAJ&dq=erikson%27s+theory+of+psychosocial+development+pdf&source=gbs_navlinks_s)
- Cohorn, C. A., & Giuliano, T. A. (1999). Predictors of adjustment and institutional attachment in 1st-year college students. *Psi Chi Journal of Undergraduate Research*, 4(2), 47-56.
- Columbus, A. (2005). *Advances in psychology research*. Retrieved from [https://books.google.co.za/books?id=fjZNaIUK3kQC&dq=King+and+kitchener+reflective+judgement+model&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=fjZNaIUK3kQC&dq=King+and+kitchener+reflective+judgement+model&source=gbs_navlinks_s)
- Cooligan, H. (2014). *Research methods and statistics in psychology*. Retrieved from [http://books.google.co.za/books?id=8DJFAwAAQBAJ&dq=anonymity+in+research&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=8DJFAwAAQBAJ&dq=anonymity+in+research&source=gbs_navlinks_s)

- Council of Higher Education, (2013). *A proposal for undergraduate curriculum reform in South Africa: The case for a flexible curriculum structure*. Pretoria, South Africa: Task Team Members. Retrieved from [www.che.ac.za/sites/default/files/publications/Full\\_Report.pdf](http://www.che.ac.za/sites/default/files/publications/Full_Report.pdf)
- Crede, M., & Niehorster, S. (2011). Adjustment to college as measured by the Student Adaptation to College Questionnaire: A quantitative review of its structure and relationships with correlates and consequences. *Educational Psychology Review*, 24(2012), 133-165. doi:10.1007/s10648-011-9184-5
- Cronbach, L. J. (1951). Coefficient alpha and the internal structure of tests. *Psychometrika*, 16, 297–334. doi:10.1007/BF02310555
- Darling, R., & Smith, M. (2007). First-generation college students: First year challenges. In M. S. Hunter, B. McCalla-Wiggins, & E. R. White (Eds.), *Academic advising: New insights for teaching and learning in the first year* (pp. 203-211). Retrieved from <https://www.nacada.ksu.edu/portals/0/Clearinghouse/AdvisingIssues/documents/first-gen.pdf>
- Dempster, M. (2011). *A research guide for health and clinical psychology*. Retrieved from [https://books.google.co.za/books?id=fqccBQAAQBAJ&dq=familiarising+with+data+in+themic+analysis&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=fqccBQAAQBAJ&dq=familiarising+with+data+in+themic+analysis&source=gbs_navlinks_s)
- Denscombe, M. (2007). *The good research guide*. Retrieved from [http://books.google.co.za/books?id=I6rRC0oyotkC&dq=advantages+and+disadvantages+of+mixed+methods+research+design&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=I6rRC0oyotkC&dq=advantages+and+disadvantages+of+mixed+methods+research+design&source=gbs_navlinks_s)
- DeStefano, T. J., Mellott, R. N., & Peterson, J. D. (2011). A preliminary assessment of the impact of counselling on student adjustment to college. *Journal of College Counseling*, 4(2), 113-121. doi:10.1002/j.2161-1882.2001.tb00191.x
- De Vaus, D. A. (2001). *Research design in social research*. Retrieved from [https://books.google.co.za/books?id=9yurQt7T65oC&dq=DeVaus+2001&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=9yurQt7T65oC&dq=DeVaus+2001&source=gbs_navlinks_s)
- Dittman, S., McKinney, G. R., & Trimble, J. E. (1994). *Students who are the first-generation of their family to attend college: A comparative study of western Washington university*

- frosh.* (Report 1994–09). Retrieved from [http://west.wvu.edu/institutional\\_research/documents/Report1994-09FirstGeneration.pdf](http://west.wvu.edu/institutional_research/documents/Report1994-09FirstGeneration.pdf)
- Ender, S. C., & Newton, F. B. (2000). *Students helping students: A guide for peer educators on college campuses*. Retrieved from [http://books.google.co.za/books/about/Students\\_Helping\\_Students.html?id=0p8nAQAACAAJ&redir\\_esc=y](http://books.google.co.za/books/about/Students_Helping_Students.html?id=0p8nAQAACAAJ&redir_esc=y)
- Erikson, E. H. (1980). *Identity and the life cycle*. New York, NY: Norton.
- Escobedo, C., Guerrero, J., Lujan, G., Ramirez, A., & Serrano, D. (2007). Ethical issues with informed consent. *Bio-ethics*, (1), 1-8. Retrieved from [https://icahn.mssm.edu/static\\_files/MSSM/Files/Research/Resources/Program%20for%20the%20of%20Human%20Subjects/EthicalIssueswithInformedConsent.pdf](https://icahn.mssm.edu/static_files/MSSM/Files/Research/Resources/Program%20for%20the%20of%20Human%20Subjects/EthicalIssueswithInformedConsent.pdf)
- Evans, A. N., & Rooney, B. J. (2010). *Methods in psychological research*. Retrieved from [http://books.google.co.za/books?id=ONlAIG4W38cC&dq=focus+groups+in+psychological+research&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=ONlAIG4W38cC&dq=focus+groups+in+psychological+research&source=gbs_navlinks_s)
- Evans, J. E., Forney, D. S., Guido, F. M., Patton, L. D., & Renn, K. A. (2009). *Student development in college: Theory, research, and practice*. Retrieved from [http://books.google.co.za/books?hl=en&lr=&id=glf01scdrsUC&oi=fnd&pg=PR13&dq=arthur+chickering%27s+theory+of+identity+development&ots=fXNuSqaz4o&sig=32ibhRLYNWi1SVpy5\\_AIDis0qWY#v=onepage&q=arthur%20chickering's%20theory%20of%20identity%20development&f=false](http://books.google.co.za/books?hl=en&lr=&id=glf01scdrsUC&oi=fnd&pg=PR13&dq=arthur+chickering%27s+theory+of+identity+development&ots=fXNuSqaz4o&sig=32ibhRLYNWi1SVpy5_AIDis0qWY#v=onepage&q=arthur%20chickering's%20theory%20of%20identity%20development&f=false)
- Felder, R. M., & Brent, R. (2004). Understanding student differences. *Journal of Engineering Education*, 94(1), 57-72. Retrieved from [http://www4.ncsu.edu/unity/lockers/users/f/felder/public/Papers/Understanding\\_Differences.pdf](http://www4.ncsu.edu/unity/lockers/users/f/felder/public/Papers/Understanding_Differences.pdf)
- Feldman, R. S. (2005). *Improving the first year of college: Research and practice*. Retrieved from <https://books.google.co.za/books?isbn=1135600902>
- Fiebig, J. N., Braid, B. L., Ross, P. A., Tom, M. A., & Prinzo, C. (2010). Hispanic community college students: Acculturation, family support, perceived educational barriers, and vocational planning. *Community College Journal of Research and Practice*, 34(10), 848-864. Retrieved from <http://dx.doi.org/10.1080/10668926.2010.491995>

- Fingerman, K. L. (2011). *Handbook of life-span development*. Retrieved from [http://books.google.co.za/books?id=OfU4fBVT5NMC&dq=multidimensional+nature+of+lifespan+development&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=OfU4fBVT5NMC&dq=multidimensional+nature+of+lifespan+development&source=gbs_navlinks_s)
- Fink, A. (2003). *How to sample in surveys*. Retrieved from [http://books.google.co.za/books?hl=en&lr=&id=2boXjk4yAeEC&oi=fnd&pg=PA50&dq=non+probability+convenience+sampling&ots=rwymks2--z&sig=59Khtv\\_rlDnvIINEGR9sI49iZIO#v=onepage&q=non%20probability%20convenience%20sampling&f=false](http://books.google.co.za/books?hl=en&lr=&id=2boXjk4yAeEC&oi=fnd&pg=PA50&dq=non+probability+convenience+sampling&ots=rwymks2--z&sig=59Khtv_rlDnvIINEGR9sI49iZIO#v=onepage&q=non%20probability%20convenience%20sampling&f=false)
- Fitzgerald, M. A. (2004). Making the leap from high school to college: Three new studies about information literacy skills of first year college students. *Knowledge Quest*, 32(4), 19-24. Retrieved from <http://www.libs.uga.edu/cloc/readings/fitzgerald.pdf>
- Forrester, M. A. (2010). *Doing qualitative research in psychology: A practical guide*. Retrieved from <http://books.google.co.za/books?id=K0t4jsWNcS4C&pg=PA100&dq=informed+consent+in+psychological+research&hl=en&sa=X&ei=L60kU-WoLZSqhAeEtoDYAg&ved=0CEQQ6AEwBA#v=onepage&q=informed%20consent%20in%20psychological%20research&f=false>
- Funston, A., Gil, M., & Gilmore, G. (2014). *Strong starts, supported transitions and student success*. Retrieved from [https://books.google.co.za/books?id=n3AxBwAAQBAJ&pg=PR4&dq=Funston,+Gil+and+Gilmore+\(2014&hl=en&sa=X&ved=0ahUKEwui9azM2bbNAhWkDcAKHW\\_5AAoQ6AEIGjAA#v=onepage&q=Funston%2C%20Gil%20and%20Gilmore%20\(2014&f=false](https://books.google.co.za/books?id=n3AxBwAAQBAJ&pg=PR4&dq=Funston,+Gil+and+Gilmore+(2014&hl=en&sa=X&ved=0ahUKEwui9azM2bbNAhWkDcAKHW_5AAoQ6AEIGjAA#v=onepage&q=Funston%2C%20Gil%20and%20Gilmore%20(2014&f=false)
- Game, A., & Metcalfe, A. (2003). *The first-year experience: Start, stay and succeed at uni*. Retrieved from <https://books.google.co.za/books?id=zS2fSQkkkPIC&printsec=frontcover&dq=Game+%26+Metcalfe,+2003&hl=en&sa=X&ved=0ahUKEwin-9Xk3LbNAhWMKcAKHfujDoYQ6AEIMjAA#v=onepage&q=Game%20%26%20Metcalfe%2C%202003&f=false>
- Ganai, M. Y., & Mir, M. A. (2013). A comparative study of adjustment and academic achievement of college students. *Journal of Educational Research and Essays*, 1(1), 5-8. Retrieved from [http://www.wynoacademicjournals.org/edu\\_research.html](http://www.wynoacademicjournals.org/edu_research.html)

- Gavin, M. K. (2008). *The relationship between first-year undergraduate students' physical activity and adjustment to college* (Doctoral dissertation). Available from ProQuest Dissertations and Theses Database (UMI No. 3318484).
- Gerrard, D. C. (2006). *The relation between a student's choice of living arrangement and student effort, achieve and college satisfaction* (Doctoral dissertation). Available from ProQuest Dissertation and Theses Database (UMI No. 3303427).
- Gibbons, M. M. (2005). *College-going beliefs of prospective first-generation college students: perceived barriers, social supports, self-efficacy, and outcome expectations* (Unpublished doctoral dissertation). The University of North Carolina, Greensboro.
- Gibson, W. J., & Brown, A. (2009). *Working with qualitative data*. London, UK: Sage.
- Goertz, G., & Mahoney, J. (2012). *A tale of two cultures: Qualitative and quantitative research in the social sciences*. Retrieved from [http://books.google.co.za/books?id=3DZ6d0d2K3EC&printsec=frontcover&dq=quantitative+research&hl=en&sa=X&ei=wKYEU\\_PPNqiT0QWdvIDACQ&ved=0CD4Q6AEwAQ#v=onepage&q=quantitative%20research&f=false](http://books.google.co.za/books?id=3DZ6d0d2K3EC&printsec=frontcover&dq=quantitative+research&hl=en&sa=X&ei=wKYEU_PPNqiT0QWdvIDACQ&ved=0CD4Q6AEwAQ#v=onepage&q=quantitative%20research&f=false)
- Goodwin, C. J. (2009). *Research in psychology: Methods and design*. Retrieved from <http://books.google.co.za/books?id=eNsVUGTMCDoC&pg=PA89&dq=quantitative+research+design+psychology&hl=en&sa=X&ei=WX0EU-DoKsbm7AaTrID4Bg&ved=0CDAQ6AEwAQ#v=onepage&q=quantitative%20research%20design%20psychology&f=false>
- Gordon, A., & Browne, K. (2013). *Beginnings and beyond: Foundations in early childhood education*. Retrieved from [https://books.google.co.za/books?id=QSsXAAAAQBAJ&dq=psychosocial+domain+of+human+development&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=QSsXAAAAQBAJ&dq=psychosocial+domain+of+human+development&source=gbs_navlinks_s)
- Gravetter, F., & Forzano, L. (2011). *Research methods for the behavioral sciences*. Retrieved from [http://books.google.co.za/books?id=pl04dzBpHy0C&dq=advantages+of+self-report+measures&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=pl04dzBpHy0C&dq=advantages+of+self-report+measures&source=gbs_navlinks_s)
- Gray, R., Vitak, J., Easton, E. W., & Ellison, N. B. (2013). Examining social adjustment to college in the age of social media: Factors influencing successful transitions and

- persistence. *Computers & Education*, 67, 193-207. Retrieved from [http://www-personal.umich.edu/~enicole/Grayetal2013\\_CAE\\_2013\\_forweb.pdf](http://www-personal.umich.edu/~enicole/Grayetal2013_CAE_2013_forweb.pdf)
- Grice, J. W., & Iwasaki, M. (2007). A true multivariate approach to MANOVA. *Applied Multivariate Research*, 12(3), 199-226. Retrieved from [http://psychology.okstate.edu/faculty/jgrice/personalitylab/Grice\\_Iwasaki\\_AMR.pdf](http://psychology.okstate.edu/faculty/jgrice/personalitylab/Grice_Iwasaki_AMR.pdf)
- Hadzi-Pavlovic, D. (2010). Multivariate analysis of variance. *Acta Neuropsychiatrica*, 22, 257-258. doi:10.1111/J.1601-5215.2010.00488.x.
- Hamrick, F. A., Evans, N. J., & Schuh, J. H. (2003). *Foundations of student affairs practice: How philosophy, theory and research strengthen educational outcomes*. Retrieved from [https://books.google.co.za/books?id=E86aupSSqZMC&dq=Baxter+Magolda%27s+different+stages+of+knowing&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=E86aupSSqZMC&dq=Baxter+Magolda%27s+different+stages+of+knowing&source=gbs_navlinks_s)
- Harrington, C. (2015). *Student success in college: Doing what works!* Retrieved from [https://books.google.co.za/books?id=LZ2aBAAQBAJ&dq=college+students+in+the+zone+of+proximal+development&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=LZ2aBAAQBAJ&dq=college+students+in+the+zone+of+proximal+development&source=gbs_navlinks_s)
- Harris, M., & Westermann, G. (2014). *A student's guide to developmental psychology*. Retrieved from [https://books.google.co.za/books?id=BIabBAAQBAJ&dq=vygotsky+theory+of+cognitive+development+and+students&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=BIabBAAQBAJ&dq=vygotsky+theory+of+cognitive+development+and+students&source=gbs_navlinks_s)
- Harvey, V. L., & Housel, T. H. (2011). *Faculty and first-generation college students: Bridging the classroom gap together: New directions for teaching and learning*. Retrieved from <https://books.google.com/books?isbn=1118142144>
- Hatch, J. A. (2010). *Doing qualitative research in education settings*. Retrieved from [https://books.google.co.za/books?id=h96R53BDEsoC&dq=disadvantages+of+individual+interviews+in+qualitative+research&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=h96R53BDEsoC&dq=disadvantages+of+individual+interviews+in+qualitative+research&source=gbs_navlinks_s)
- Hayes, M. J. (2008). *Cultural identity and the social adjustment and academic adjustment of African American college students* (Doctoral dissertation, University of Hartford). Retrieved from <https://books.google.co.za/books?id=TBDqCWRZA2AC&pg=PA17&dq=academic+integration+and+adjustment&hl=en&sa=X&ved=0CBsQ6AEwAGoVChMItoDKkLi9yAIV>

wscUCh1x4AsV#v=onepage&q=academic%20integration%20and%20adjustment&f=false

- Hays, D. G., & Singh, A. A. (2011). *Qualitative inquiry in clinical and educational settings*. Retrieved from [https://books.google.co.za/books?id=L\\_PbcZvXUk8C&dq=disadvantages+of+individual+interviews&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=L_PbcZvXUk8C&dq=disadvantages+of+individual+interviews&source=gbs_navlinks_s)
- Healey, J. F. (2015). *The essentials of statistics: A tool for social research*. Retrieved from [https://books.google.co.za/books?id=Iy1-BAAAQBAJ&dq=descriptive+statistics+in+research&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=Iy1-BAAAQBAJ&dq=descriptive+statistics+in+research&source=gbs_navlinks_s)
- Heppner, P., Wampold, B., & Kivlighan, D. (2007). *Research design in counseling*. Retrieved from [http://books.google.co.za/books?id=AbYEKcF3jP4C&dq=Self-report+measures&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=AbYEKcF3jP4C&dq=Self-report+measures&source=gbs_navlinks_s)
- Hertel, J. B. (2002). College student generational status: Similarities, differences, and factors in college adjustment. *The Psychological Record*, 52, 3-18. Retrieved from <http://opensiuc.lib.siu.edu/cgi/viewcontent.cgi?article=1164&context=tpr>
- Hesse-Biber, S. N., & Leavy, P. (2010). *The practice of qualitative research*. Retrieved from [http://books.google.co.za/books?id=FVjcZk7mCFwC&dq=a+mixed+method+research+design+was+chosen+to+fully+investigate+the+research+objectives&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=FVjcZk7mCFwC&dq=a+mixed+method+research+design+was+chosen+to+fully+investigate+the+research+objectives&source=gbs_navlinks_s)
- Heywood, J. (2000). *Assessment in higher education: Student learning, teaching, programmes and institutions*. Retrieved from [https://books.google.co.za/books?id=4bn83L0gURQC&dq=King+and+kitchener+reflective+judgement+model&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=4bn83L0gURQC&dq=King+and+kitchener+reflective+judgement+model&source=gbs_navlinks_s)
- Hicks, T., & Pitre, A. (2012). *Research studies in higher education: Educating multicultural college students*. Retrieved from [https://books.google.co.za/books?id=rDSSBAAAQBAJ&dq=familial+support+for+first+generation+students&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=rDSSBAAAQBAJ&dq=familial+support+for+first+generation+students&source=gbs_navlinks_s)
- Hinchliffe, L. J., & Wong, M. A. (2012). *Environments for student growth and development: Libraries and student affairs in collaboration*. Retrieved from [https://books.google.co.za/books?id=k69e2HC81GUC&dq=perry%27s+theory+of+cognitive+development&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=k69e2HC81GUC&dq=perry%27s+theory+of+cognitive+development&source=gbs_navlinks_s)

- Hoare, C. H. (2001). *Erikson on development in adulthood: New insights from unpublished paper*. Retrieved from [https://books.google.co.za/books?id=PKRjzU2DSEYC&dq=erikson&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=PKRjzU2DSEYC&dq=erikson&source=gbs_navlinks_s)
- Hu, S., & Kuh, G. D. (2003). Maximising what students get out of college: Testing a learning productivity model. *Journal of College Student Development*, 44(2), 185-202. Retrieved from <http://0-search.ebscohost.com.wagtail.ufs.ac.za/login.aspx?direct=true&db=&AN=2003-03324-004&site=ehost-live>
- Huberty, C. J., & Morris, J. D. (1989). Multivariate analysis versus multiple univariate analysis. *Psychological Bulletin*, 105(2), 302-308.
- Jackson, S. (2014). *Research methods: A modular approach*. Retrieved from [https://books.google.co.za/books?id=4O4bCgAAQBAJ&dq=descriptive+approach+in+research&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=4O4bCgAAQBAJ&dq=descriptive+approach+in+research&source=gbs_navlinks_s)
- Jama, M. P., Mapesela, M. L. E., & Beylefeld, A. A. (2008). Theoretical perspectives on factors affecting the academic performance of students. *South African Journal of Higher Education*, 22(5), 992-1005. Retrieved from <http://0-search.ebscohost.com.wagtail.ufs.ac.za/login.aspx?direct=true&db=hus&AN=40208558&site=ehost-live>
- Jean, D. (2010). *The academic and social adjustment of first-generation college students* (Unpublished doctoral dissertation). Seton Hall University, New Jersey.
- Jehangir, R. R. (2010). *Higher education and first-generation students: Cultivating community, voice, and place for the new majority*. Retrieved from [https://books.google.co.za/books?id=qcvHAAAQBAJ&dq=pascarella+first+generation+students&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=qcvHAAAQBAJ&dq=pascarella+first+generation+students&source=gbs_navlinks_s)
- Jenney, T. J. (2011). The holistic development of college students: Spirituality as a predictor of college students pro-social character development. *Culture & Religion Journal*, 4, 56-145. Retrieved from <http://udini.proquest.com/view/the-holistic-development-of-college-goid:882865481/>
- Jex, S. M., & Britt, T. W. (2008). *Organizational psychology: A scientist-practitioner approach*. Retrieved from <http://books.google.co.za/books?id=ahcpsTJkBY8C&pg=PA36&dq=self+report+measures+advantages+and+disadvantages&hl=en&sa=X&ei=4>

WVhU9PmFlaIygGusoCYCw&ved=0CE4Q6AEwBQ#v=onepage&q=self%20report%20measures%20advantages%20and%20disadvantages&f=false

Jindal-Snape, D., & Rienties, B. (2016). *Multi-dimensional transitions of international students to higher education*. Retrieved from [https://books.google.co.za/books?id=\\_4OPCwAAQBAJ&dq=Jindal-Snape,+2010&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=_4OPCwAAQBAJ&dq=Jindal-Snape,+2010&source=gbs_navlinks_s)

Johansson, C., & Felten, P. (2014). *Transforming students: Fulfilling the promise of higher education*. Retrieved from [https://books.google.co.za/books?id=eK0AAwAAQBAJ&dq=Johansson+C.+%26+Felten+P.+\(2014\)+Transforming+Students:+Fulfilling+the+Promise+of+Higher+Education.+Baltimore,+MD:+Johns+Hopkins+Press.&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=eK0AAwAAQBAJ&dq=Johansson+C.+%26+Felten+P.+(2014)+Transforming+Students:+Fulfilling+the+Promise+of+Higher+Education.+Baltimore,+MD:+Johns+Hopkins+Press.&source=gbs_navlinks_s)

Johnson, B., & Christensen, L. (2010). *Educational Research: Quantitative, qualitative, and mixed approaches*. Retrieved from [http://books.google.co.za/books?id=b2ujHWrRpVQC&dq=what+is+a+quantitative+cross+sectional+design&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=b2ujHWrRpVQC&dq=what+is+a+quantitative+cross+sectional+design&source=gbs_navlinks_s)

Jones, B., Coetzee, G., Bailey, T., & Wickham, S. (2008). *Factors that facilitate success for disadvantaged higher education students: An investigation into approaches used by REAP, NSFAS, and selected higher education institutions*. Cape Town, South Africa: Rural Education Access Programme (REAP) & Research and Academic Development (RAD). Retrieved from [http://www.reap.org.za/pieces/reports/pdf/tracking\\_reports/2008\\_June\\_factors\\_that\\_facilitate\\_success.pdf](http://www.reap.org.za/pieces/reports/pdf/tracking_reports/2008_June_factors_that_facilitate_success.pdf)

Jones, S. R., & Abes, E. S. (2013). *Identity development of college students: Advancing frameworks for multiple dimensions of identity*. Retrieved from [https://books.google.co.za/books?id=2G9NRdLDkKYC&dq=development+areas+in+students&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=2G9NRdLDkKYC&dq=development+areas+in+students&source=gbs_navlinks_s)

Kanno, Y., & Harklau, L. (2012). *Linguistic minority students go to college: Preparations, access and persistence*. Retrieved from <https://books.google.co.za/books?id=YcWsAgAAQBAJ&pg=PT5&dq=Kanno+%26+Harklau,+2012&hl=en&sa=X&ved=0ahUKEwjXzJGr1LbNAhXqAsAKHdYOC2IQ6AEIGjAA#v=onepage&q=Kanno%20%26%20Harklau%2C%202012&f=false>

- Kearns, K. (2013). *Birth to big school*. Retrieved from <https://books.google.co.za/books?id=zgCpBQAAQBAJ&pg=PA48&dq=vygotsky+theory+of+cognitive+development+pdf&hl=en&sa=X&ei=sP9tVdaAE4SeygPMtoLAAQ&ved=0CDkQ6AEwAw#v=onepage&q=vygotsky%20theory%20of%20cognitive%20development%20pdf&f=false>
- King, N., & Horrocks, C. (2010). *Interviews in qualitative research*. Retrieved from [http://books.google.co.za/books?id=iOsnITKC48gC&dq=thematic+analysis+in+qualitative+research&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=iOsnITKC48gC&dq=thematic+analysis+in+qualitative+research&source=gbs_navlinks_s)
- King, P. M., & Kitchener, K. S. (2004). Reflective judgement: Theory and research on the development of epistemic assumptions through adulthood. *Educational Psychologist*, 39(1), 5-18.
- Klenke, K. (2008). *Qualitative research in the study of leadership*. Retrieved from [https://books.google.co.za/books?id=bvtY7TvU3sEC&dq=semi+structured+interviews+in+qualitative+research+advantages&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=bvtY7TvU3sEC&dq=semi+structured+interviews+in+qualitative+research+advantages&source=gbs_navlinks_s)
- Kuh, G. D., Kinzie, J., Schuh, J. H., & Whitt, E. J. (2011). *Student success in college: Creating conditions that matter*. Retrieved from [https://books.google.co.za/books?id=9KnfFmNYuBMC&dq=Student+success+in+college+kuh+2010&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=9KnfFmNYuBMC&dq=Student+success+in+college+kuh+2010&source=gbs_navlinks_s)
- Kumar, R. (2014). *Research methodology: A step-by-step guide for beginners*. Retrieved from [https://books.google.co.za/books?id=WK05AwAAQBAJ&dq=Kumar+2014&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=WK05AwAAQBAJ&dq=Kumar+2014&source=gbs_navlinks_s)
- Kyalo, P. M., & Chumba, R. J. (2011). Selected factors influencing social and academic adjustment of undergraduate students of Egerton University: Njoro campus. *International Journal of Business and Social Science*, 2(18), 274-290. Retrieved from [http://ijbssnet.com/journals/Vol\\_2\\_No\\_18\\_October\\_2011/33.pdf](http://ijbssnet.com/journals/Vol_2_No_18_October_2011/33.pdf)
- Landow, M. V. (2006). *Stress and mental health of college students*. Retrieved from <http://books.google.co.za/books?id=T4U0ZKtQkLUC&printsec=frontcover&dq=stress+and+mental+health&hl=en&sa=X&ei=1rBCU7KQHMiO7QakgoGoDA&ved=0CCwQ6AEwAA#v=onepage&q=stress%20and%20mental%20health&f=false>
- Leird, T. F. N., Seifert, T. A., Pascarella, E. T., Mayhew, M. J., & Blaich, C. F. (2014). Deeply affecting first-year students' thinking: Deep approaches to learning and three dimensions

- of cognitive development. *The Journal of Higher Education*, 85(3), 402-432. Retrieved from <http://0-search.ebscohost.com.wagtail.ufs.ac.za/login.aspx?direct=true&db=a9h&AN=95613437&site=ehost-live>
- Letseka, M., & Maile, S. (2008). *High university dropout rates: A threat to South Africa's future*. HSRC Policy Brief. Retrieved from <http://sayvon.org.za/Document-2717.pdf>
- Littlefield Cook, J., & Cook, G. (2005). *Child development: Principles and perspectives*. Retrieved from <http://www.pearsonhighered.com/samplechapter/0205314112.pdf>
- Long, D. (2012). Theories and models of student development. In L. J. Hinchliffe & M. A. Wong (Eds.), *Environments for student growth and development: Librarians and student affairs in collaboration* (pp. 41-55). Chicago, IL: Association of College & Research Libraries.
- Love, P. G., & Guthrie, V. L. (2011). *Understanding and applying cognitive development theory*. Retrieved from [https://books.google.co.za/books?id=7DzufMGLz9MC&dq=perry%27s+theory+of+cognitive+development&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=7DzufMGLz9MC&dq=perry%27s+theory+of+cognitive+development&source=gbs_navlinks_s)
- Lutz, S., & Huitt, W. (2004). Connecting cognitive development and constructivism: Implications from theory for instruction and assessment. *Constructivism in the Human Sciences*, 9(1), 67-90.
- Lyons, N. (2010). *Handbook of reflection and reflective inquiry: Mapping a way of knowing for professional reflective inquiry*. Retrieved from [https://books.google.co.za/books?id=2nOpVDNKMBYC&dq=Lyons+2010+perry%27s+schemes&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=2nOpVDNKMBYC&dq=Lyons+2010+perry%27s+schemes&source=gbs_navlinks_s)
- Machado, C. A., Almeida, L. S., & Soares, P. C. (2002). Academic experience at the beginning and the end of university studies. *European Journal of Education*, 37(4), 387-394. Retrieved from <http://0-search.ebscohost.com.wagtail.ufs.ac.za/login.aspx?direct=true&db=a9h&AN=8699711&site=ehost-live>
- Mahoney, J., & Goertz, G. (2006). A tale of two cultures: Contrasting quantitative and qualitative research. *Political Analysis*, 14, 227-249. doi:10.1093/pan/mpj017
- Major, C. H., & Savin-Baden, M. (2012). *An introduction to qualitative research synthesis: Managing the information explosion in social science research*. Retrieved from

[http://books.google.co.za/books?id=hXO9ZdzuV30C&dq=trustworthiness+in+qualitative+research&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=hXO9ZdzuV30C&dq=trustworthiness+in+qualitative+research&source=gbs_navlinks_s)

Mangal, S. K. (2002). *Advanced educational psychology*. Retrieved from [http://books.google.co.za/books?id=HyQgZTQnAtAC&dq=arkoff+1968&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=HyQgZTQnAtAC&dq=arkoff+1968&source=gbs_navlinks_s)

Mangal, S. K., & Mangal, S. (2015). *Emotional intelligence: Managing emotions to win life*. Retrieved from [https://books.google.co.za/books?id=8QyDBgAAQBAJ&dq=mangal+and+mangal+2015&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=8QyDBgAAQBAJ&dq=mangal+and+mangal+2015&source=gbs_navlinks_s)

Marrow, S. L. (2005). Quality and trustworthiness in qualitative research in counselling psychology. *Journal of Counselling Psychology*, 52(2), 250-260. doi:10.1037/0022-0167.52.2.250

Maruish, M. E. (2004). *The use of psychological testing for treatment planning and outcomes assessment: Volume 1: General considerations*. Retrieved from [http://books.google.co.za/books?id=XQ2QAgAAQBAJ&dq=Self-report+measures+in+psychology&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=XQ2QAgAAQBAJ&dq=Self-report+measures+in+psychology&source=gbs_navlinks_s)

McCarron, G. P., & Inkelas, K. K. (2006). The gap between educational aspirations and attainment for first-generation college students and the role of parental involvement. *Journal of College Student Development*, 47(5), 534-549. Retrieved from [http://0-muse.jhu.edu.wagtail.ufs.ac.za/journals/journal\\_of\\_college\\_student\\_development/v047/47.5mccarron.html](http://0-muse.jhu.edu.wagtail.ufs.ac.za/journals/journal_of_college_student_development/v047/47.5mccarron.html)

McIlroy, D. (2003). *Studying at university: How to be a successful student*. Retrieved from <https://books.google.co.za/books?isbn=0761947078>

McKeown, J. S. (2009). *The first time effect: The impact of study abroad on college student intellectual development*. Retrieved from <https://books.google.co.za/books?isbn=0791493601>

Merriam, S. B., Caffarella, R. S., & Baumgartner, L. M. (2012). *Learning in adulthood: A comprehensive guide*. Retrieved from <https://books.google.co.za/books?isbn=0470229225>

- Miles, J., & Gilbert, P. (2005). *A handbook of research methods for clinical and health psychology*. Retrieved from [https://books.google.co.za/books?id=kmZ3Yt5pY0YC&dq=Reason+to+use+semi-structured+interviews&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=kmZ3Yt5pY0YC&dq=Reason+to+use+semi-structured+interviews&source=gbs_navlinks_s)
- Moagi-Jama, M. P. (2009). *Designing an academic support and development programme to combat attrition among non-traditional medical undergraduates* (Doctoral dissertation). Available from KopsieScholar Electronic Theses and Dissertations (2016-01-13T07:25:15Z).
- Moon, J. (2007). *Critical thinking: An exploration of theory and practice*. Retrieved from [https://books.google.co.za/books?id=BOmkEro\\_IGYC&dq=Baxter+Magolda%27s+different+stages+of+knowing&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=BOmkEro_IGYC&dq=Baxter+Magolda%27s+different+stages+of+knowing&source=gbs_navlinks_s)
- Morrow, S. L. (2005). Quality and trustworthiness in qualitative research in counselling psychology. *Journal of Counselling Psychology*, 52(2), 250-260. doi:10.1037/0022-0167.52.2.250
- Moseley, D. (2005). *Frameworks for thinking: A handbook for teaching and learning*. Retrieved from [https://books.google.co.za/books?id=s1D2IXoNZjwC&dq=King+and+kitchener+reflective+judgement+model&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=s1D2IXoNZjwC&dq=King+and+kitchener+reflective+judgement+model&source=gbs_navlinks_s)
- Mudhovozi, P. (2011). Adjustment experiences of international students at a South African university. *Journal of Psychology in Africa*, 21(2), 293-296. Retrieved from <http://connection.ebscohost.com/c/articles/66252776/adjustment-experiences-international-students-south-african-university>
- Mudhovozi, P. (2012). Social and academic adjustment of first-year university students. *Journal of Social Science*, 33(2), 251-259. Retrieved from [www.krepublishers.com/02-Journals/JSS/JSS-33-0-000-12-Web/JSS-33-2-251-12-1278-Mudhovozi-P/JSS-33-2-251-12-1278-Mudhovozi-P-Tx\[11\].pdf](http://www.krepublishers.com/02-Journals/JSS/JSS-33-0-000-12-Web/JSS-33-2-251-12-1278-Mudhovozi-P/JSS-33-2-251-12-1278-Mudhovozi-P-Tx[11].pdf)
- Muijs, D. (2010). *Doing quantitative research in education with SPSS*. Retrieved from <http://books.google.co.za/books?id=apFMQHF768EC&pg=PA1&dq=quantitative+research+definition&hl=en&sa=X&ei=9PwEU932MceJ0AWlkIDYDQ&ved=0CCoQ6AEwAA#v=onepage&q=quantitative%20research%20indepth&f=false>

- Nairne, J. (2013). *Psychology*. Retrieved from [http://books.google.co.za/books?id=3cYWAAAAQBAJ&dq=descriptive+cross+sectional+research+design+advantages+and+disadvantages&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=3cYWAAAAQBAJ&dq=descriptive+cross+sectional+research+design+advantages+and+disadvantages&source=gbs_navlinks_s)
- Nevid, J. (2008). *Psychology: Concepts and applications*. Retrieved from [http://books.google.co.za/books?id=LsVK0kSpzx8C&dq=adjustment+theories+in+psychology&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=LsVK0kSpzx8C&dq=adjustment+theories+in+psychology&source=gbs_navlinks_s)
- Newman, B., & Newman, P. (2012). *Development through life: A psychosocial approach*. Retrieved from [https://books.google.co.za/books?id=oTY\\_7osGmqUC&dq=psychosocial+development+pdf&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=oTY_7osGmqUC&dq=psychosocial+development+pdf&source=gbs_navlinks_s)
- Nezu, A. M., & Nezu, C. M. (2007). *Evidence-based outcome research: A practical guide to conducting randomized controlled trials for psychosocial interventions*. Retrieved from [http://books.google.co.za/books?id=cXEFct6AobIC&dq=disadvantage+of+convenience+sampling&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=cXEFct6AobIC&dq=disadvantage+of+convenience+sampling&source=gbs_navlinks_s)
- Nicoteri, J., & Arnold, J. C. (2005). The development of health-care seeking behaviours in traditional-age undergraduate college students. *Journal of the American Academy of Nurse Practitioners*, 17(10), 411-415. Retrieved from <http://0-search.ebscohost.com.wagtail.ufs.ac.za/login.aspx?direct=true&db=a9h&AN=18353427&site=ehost-live>
- Oakley, L. (2004). *Cognitive development*. Retrieved from [https://books.google.co.za/books?id=DI5ZvK3q\\_ogC&dq=vygotsky+theory+of+cognitive+development+pdf&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=DI5ZvK3q_ogC&dq=vygotsky+theory+of+cognitive+development+pdf&source=gbs_navlinks_s)
- Ojose, B. (2008). Applying Piaget's theory of cognitive development to mathematics instruction. *The Mathematics Instructor*, 18(1), 26-30. Retrieved from <http://files.eric.ed.gov/fulltext/EJ841568.pdf>
- Onwuegbuzie, A. J., & Collins, K. M. T. (2007). A typology of mixed methods sampling designs in social science research. *The Qualitative Report*, 12(2), 281-316. doi:<http://www.nova.edu/ssss/QR/QR12-2/onwuegbuzie2.pdf>
- Onwuegbuzie, A. J., & Leech, N. L. (2005). Taking the "Q" out of research: Teaching research methodology courses without the divide between quantitative and qualitative paradigms. *Quality & Quantity*, 39, 267-296. doi:10.1007/s11135-004-1670-0

- Osborne, J. W. (2008). *Best practices in quantitative methods*. Retrieved from [http://books.google.co.za/books?id=M5\\_FCgCuwFgC&pg=PA39&dq=cronbach+alpha+coefficient&hl=en&sa=X&ei=3A0kU4arJIm7hAeu5IHw&ved=0CDMQ6AEwAQ#v=snippet&q=trustworthiness&f=false](http://books.google.co.za/books?id=M5_FCgCuwFgC&pg=PA39&dq=cronbach+alpha+coefficient&hl=en&sa=X&ei=3A0kU4arJIm7hAeu5IHw&ved=0CDMQ6AEwAQ#v=snippet&q=trustworthiness&f=false)
- O'Neill, J. (2007). *Understanding action learning*. Retrieved from [https://books.google.co.za/books?id=D9F-DhQ0zfUC&dq=William+Perry+cognitive+development&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=D9F-DhQ0zfUC&dq=William+Perry+cognitive+development&source=gbs_navlinks_s)
- Otlu, F. N. (2010). *College adjustment of international students: The role of gender, acculturative stress, coping skills, cultural distance, and perceived social support* (Master's thesis). Retrieved from <http://etd.lib.metu.edu.tr/upload/12612769/index.pdf>
- Padgett, R. D., Johnson, M. P., & Pascarella, E. T. (2012). First-generation undergraduate students and the impacts of first year of college: Additional evidence. *Journal of College Student Development, 53*(2), 243-266. doi:10.1353.csd.2012.0032
- Park, C. L., Edmondson, D., & Lee, J. (2011). Development of self-regulation abilities as predictors of psychological adjustment across the first year of college. *Journal of Adult Development, 19*, 40-49. doi:10.1007/s10804-011-9133-z
- Pascarella, E. T., & Terenzini, P. T. (1976). Informal interaction with faculty and freshman ratings of academic and non-academic experience of college. *Journal of Educational Research, 70*(1), 35-41. Retrieved from <http://0-search.ebscohost.com.wagtail.ufs.ac.za/login.aspx?direct=true&db=a9h&AN=5007039&site=ehost-live>
- Pascarella, E. T., & Terenzini, P. T. (1977). Voluntary freshman attrition and patterns of social and academic integration in a university: A test of a conceptual model. *Research in Higher Education, 6*, 25-43. Retrieved from <http://0-search.ebscohost.com.wagtail.ufs.ac.za/login.aspx?direct=true&db=psych&AN=1978-24074-001&site=ehost-live>
- Pascarella, E. T., & Terenzini, P. T. (1979). Interaction effects in Spady's and Tinto's conceptual models of college dropout. *Sociology of Education, 52*, 197-210. Retrieved from <http://0-search.ebscohost.com.wagtail.ufs.ac.za/login.aspx?direct=true&db=sih&AN=13008246&site=ehost-live>

- Pascarella, E. T., & Terenzini, P. T. (1983). Predicting voluntary freshman year persistence/withdrawal behaviour in a residential university: A path analytic validation of Tinto's model. *Journal of Educational Psychology*, 75(2), 215-226. Retrieved from <http://0-search.ebscohost.com.wagtail.ufs.ac.za/login.aspx?direct=true&db=pdh&AN=1983-26705-001&site=ehost-live>
- Pascarella, E. T., Pierson, C. T., Wolniak, G. C., & Terenzini, P. T. (2004). First-generation college students: Additional evidence on college experiences and outcomes. *Journal of Higher Education*, 75(3), 249-284. Retrieved from <http://urbanupbound.org/wp-content/uploads/2014/09/first-gen-college-students.pdf>
- Pascarella, E. T., Terenzini, P. T., & Wolfle, L. M. (1986). Orientation to college and freshman year persistence/withdrawal decisions. *Journal of Higher Education*, 57(2), 155-175. Retrieved from [ftp://mystery.sonoma.edu/pub/references/Pascarella\\_etal\\_Orientation\\_FY\\_Decisions.pdf](ftp://mystery.sonoma.edu/pub/references/Pascarella_etal_Orientation_FY_Decisions.pdf)
- Patton, L. D., Renn, K. A., Guido, F. M., Quaye, S. J., Evans, N. J., & Forney, D. S. (2016). Student development in college: Theory, research and practice. Retrieved from [https://books.google.co.za/books?id=E-IRCgAAQBAJ&dq=definition+of+student+development&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=E-IRCgAAQBAJ&dq=definition+of+student+development&source=gbs_navlinks_s)
- Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. London, UK: Sage.
- Paulsen, M. B. (2013). *Higher education: Handbook of theory and research*. Retrieved from <http://books.google.co.za/books?id=WbZGAAAAQBAJ&pg=PA98&lpg=PA98&dq=Baker+and+Siryk+with+Tinto%27s+theory&source=bl&ots=bABPDuSIek&sig=iSUZGT AeU5SYJKyj3-5wjaIkiqE&hl=en&sa=X&ei=-RMOVKD6FYngaOjNgZgJ&ved=0CCMQ6AEwAQ#v=onepage&q=Baker%20and%20Siryk%20with%20Tinto's%20theory&f=false>
- Perry, W. G. (1981). Cognitive and ethical growth: The making of meaning. In A. W. Chickering, & Associates (Eds.). *The modern American college. Responding to the new realities of diverse students and a changing society* (pp.76-116). San Francisco, CA: Jossey-Bass.

- Peterson, I., Louw, J., & Dumont, K. (2009). Adjustment to university and academic performance among disadvantaged students in South Africa. *Educational Psychology*, 29(1), 99-115. Retrieved from <http://dx.doi.org/10.1080/01443410802521066>
- Petrova, E. A. (2008). *The relationship between alexithymia and functional somatization in college students in the United States* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database. (UMI No. 3333144).
- Piaget, J. (2001). *The psychology of intelligence*. New York, NY: Routledge.
- Pitney, W. A., & Parker, J. (2009). *Qualitative research in physical activity and the health professions*. Retrieved from [https://books.google.co.za/books?id=IDXjrDrtjgYC&printsec=frontcover&source=gbs\\_ge\\_summary\\_r&cad=0#v=onepage&q&f=false](https://books.google.co.za/books?id=IDXjrDrtjgYC&printsec=frontcover&source=gbs_ge_summary_r&cad=0#v=onepage&q&f=false)
- Pittman, L. D., & Richmond, A. (2008). University belonging, friendship quality, and psychological adjustment during the transition to college. *The Journal of Experimental Education*, 76(4), 343-361. Retrieved from [http://www.tandfonline.com/doi/abs/10.3200/JEXE.76.4.343362?journalCode=vjxe20#.UX\\_P67VHJqU](http://www.tandfonline.com/doi/abs/10.3200/JEXE.76.4.343362?journalCode=vjxe20#.UX_P67VHJqU)
- Polit, D. F., & Beck, C. T. (2013). *Essentials of nursing research: Appraising evidence for nursing practice*. Retrieved from [http://books.google.co.za/books?id=N4TpwETZYPQC&dq=disadvantage+of+convenience+sampling&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=N4TpwETZYPQC&dq=disadvantage+of+convenience+sampling&source=gbs_navlinks_s)
- Pope, C., Mays, N., & Popay, J. (2007). *Synthesising qualitative and quantitative health evidence: A guide to methods*. Retrieved from [http://books.google.co.za/books?id=L3fbE6oio8kC&dq=advantages+thematic+analysis+in+qualitative+research&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=L3fbE6oio8kC&dq=advantages+thematic+analysis+in+qualitative+research&source=gbs_navlinks_s)
- Porter, C. D. (2007). *Collegiate expectations*. Retrieved from [https://books.google.co.za/books?id=AOzxAgAAQBAJ&dq=arthur+chickering%27s+seven+vectors&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=AOzxAgAAQBAJ&dq=arthur+chickering%27s+seven+vectors&source=gbs_navlinks_s)
- Quaye, S. J., & Harper, S. R. (2014). *Student engagement in higher education: Theoretical perspectives and practical approaches for diverse populations*. Retrieved from [https://books.google.co.za/books?id=Y3Y9BAAAQBAJ&pg=PA56&dq=Quaye+%26+Harper,+2012&hl=en&sa=X&ved=0ahUKEwi4iLb\\_1LbNAhVFL8AKHeDIAFEQ6AEIHjAA#v=onepage&q=Quaye%20%26%20Harper%2C%202012&f=false](https://books.google.co.za/books?id=Y3Y9BAAAQBAJ&pg=PA56&dq=Quaye+%26+Harper,+2012&hl=en&sa=X&ved=0ahUKEwi4iLb_1LbNAhVFL8AKHeDIAFEQ6AEIHjAA#v=onepage&q=Quaye%20%26%20Harper%2C%202012&f=false)

- Reason, R. D., Terenzini, P. T., & Domingo, R. J. (2006). First things first: Developing academic competence in the first year of college. *Research in Higher Education, 47*(2), 149-175. doi:10.1007/s11162-005-8884-4
- Reiss, H. T., & Judd, C. M. (2000). *Handbook of research methods in social and personality psychology*. Retrieved from [https://books.google.co.za/books?id=j7aawGLbtEoC&dq=interviewer+bias&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=j7aawGLbtEoC&dq=interviewer+bias&source=gbs_navlinks_s)
- Reynolds-Adkins, M. E. (2008). *Relationship between student retention and client presenting concern*. Retrieved from [https://books.google.co.za/books?id=tb37wsE2CMoC&dq=pascarella+and+terenzini+attrition+theory&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=tb37wsE2CMoC&dq=pascarella+and+terenzini+attrition+theory&source=gbs_navlinks_s)
- Rust, V., Dhanatya, C., Furuto, L. H. L., & Kheiltash, O. (2007). Student involvement as predictive of college freshmen plans to study abroad. *Frontiers: The Interdisciplinary Journal of Study Abroad, 15*, 1-16. Retrieved from <http://www.frontiersjournal.com/documents/RustetalFrontiersXVFall2007.pdf>
- Saenz, V. B., Hurtado, S., Barrera, D., Wolf, D., & Yeung, F. (2007). *First in my family: A profile of first-generation college students at a four-year institution since 1971*. Los Angeles, CA: Higher Education Research Institution. UCLA. Retrieved from <http://www.heri.ucla.edu/PDFs/pubs/TFS/Special/Monographs/FirstInMyFamily.pdf>
- Salami, S. O. (2011). Psychosocial predictors of adjustment among first year college of education students. *US-China Education Review, 8*(2), 239-248. Retrieved from <http://files.eric.ed.gov/fulltext/ED519567.pdf>
- Salkind, N. J. (2010). *Encyclopaedia of research design: Volume 1*. Retrieved from [https://books.google.co.za/books?id=pvo1SauGirsC&dq=exploratory+research+design&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=pvo1SauGirsC&dq=exploratory+research+design&source=gbs_navlinks_s)
- Sandelowski, M. (2000). Focus on research methods: Combining qualitative and quantitative sampling, data collection, and analysis techniques in mixed-method studies. *Research in Nursing & Health, 23*, 246-255. Retrieved from [https://axis.cdrewu.edu/axis\\_doc/functions/research-design-biostatistics/sampling\\_collection\\_analysis.pdf](https://axis.cdrewu.edu/axis_doc/functions/research-design-biostatistics/sampling_collection_analysis.pdf)

- Schuh, J. H., Jones, S. R., & Harper, S. R. (2010). *Student services: A handbook for the profession*. Retrieved from [https://books.google.co.za/books?id=q73BMTMx6AYC&dq=king+and+kitchener%27s+reflective+judgement+model&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=q73BMTMx6AYC&dq=king+and+kitchener%27s+reflective+judgement+model&source=gbs_navlinks_s)
- Schultz, B. R. (2008). *A descriptive study of freshman adjustment to college at the University of Alaska* (Doctoral dissertation). Available from ProQuest Dissertations and Theses database (UMI No. 3338012).
- Sekaran, U., & Bougie, R. (2010). *Research methods for business: A skill building approach*. Retrieved from [http://books.google.co.za/books?id= a\\_\\_YI3TJQuAC&pg=PA276&dq=non+probability+convenience+sampling&hl=en&sa=X&ei=YgIGU4fZDYSN7QbJ9oGoBg&ved=0CDgQ6AEwAg#v=onepage&q=non%20probability%20convenience%20sampling&f=false](http://books.google.co.za/books?id= a__YI3TJQuAC&pg=PA276&dq=non+probability+convenience+sampling&hl=en&sa=X&ei=YgIGU4fZDYSN7QbJ9oGoBg&ved=0CDgQ6AEwAg#v=onepage&q=non%20probability%20convenience%20sampling&f=false)
- Severiens, S. E., & Schmidt, H. G. (2008). Academic and social integration and study progress in problem based learning. *International Journal of Higher Education*, (58), 59-69. doi:10.1007/s10734-008-9181-x
- Seville, C. G., Punsalan, T. G., Rovira, L. G., & Vendivel, F. G., & (2006). *General psychology with values development lessons* (4th ed.). Retrieved from [http://books.google.com.ph/books?id=ipi64yyt52UC&vq=adjustment&hl=tl&source=gbs\\_navlinks\\_s](http://books.google.com.ph/books?id=ipi64yyt52UC&vq=adjustment&hl=tl&source=gbs_navlinks_s)
- Shaffer, D. (2004). *Social and personality development*. Retrieved from [http://books.google.co.za/books?id=UTw8AAAAQBAJ&pg=PA30&dq=descriptive+cross+sectional+research+design+advantages+and+disadvantages&hl=en&sa=X&ei=qANhU\\_mYDImkPYzLgSg&ved=0CEEQ6AEwAzgK#v=onepage&q=descriptive%20cross%20sectional%20research%20design%20advantages%20and%20disadvantages&f=false](http://books.google.co.za/books?id=UTw8AAAAQBAJ&pg=PA30&dq=descriptive+cross+sectional+research+design+advantages+and+disadvantages&hl=en&sa=X&ei=qANhU_mYDImkPYzLgSg&ved=0CEEQ6AEwAzgK#v=onepage&q=descriptive%20cross%20sectional%20research%20design%20advantages%20and%20disadvantages&f=false)
- Sharma, B. (2012). Adjustment and emotional maturity among first year college students. *Pakistan Journal of Social and Clinical Psychology*, 10(2), 32-37. Retrieved from <http://www.gcu.edu.pk/fulltextjour/pjscs/2012july/5.pdf>
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22, 63-75. Retrieved from <https://xa.yimg.com/kq/groups/73868647/750861395/name/Trustworthypaper.pdf>

- Sigelman, C. K., & Rider, E. A. (2012). *Life-span human development* (7th ed.). Retrieved from <http://occupytampa.org/files/tristan/tlib/lifespan.pdf>
- Skipper, T. L. (2005). *Student development in the first college year: A primer for college educators*. University of South Carolina: National Resource Center for the First-Year Experience and Students in Transition. Retrieved from <https://www.gonzaga.edu/Campus+Resources/Offices+and+Services+A-Z/Academic-Vice-President/CTA/Documents/Who-are-our-students/PsychosocialTheoriesofStudentDevelopment.pdf>
- Smart, J. C., & Paulsen, M. B. (2011). *Higher education: Handbook of theory and research*. Retrieved from <https://books.google.co.za/books?isbn=9400707029>
- Smith, J. A. (2007). *Qualitative psychology: A practical guide to research methods*. Retrieved from <http://books.google.co.za/books?hl=en&lr=&id=D5xHYpXVDAAC&oi=fnd&pg=PR5&dq=quantitative+research+design+psychology&ots=QxVVZpvHTf&sig=5jYVYHksdM6qHhvNT2zdHfqrkIo#v=onepage&q=quantitative%20research%20design%20psychology&f=false>
- Smith, M. C., & DeFrates-Densch, N. (2008). *Handbook of research on adult learning and development*. Retrieved from <https://books.google.co.za/books?id=WpeNAgAAQBAJ&pg=PA34&dq=emerging+adulthood+and+student+development&hl=en&sa=X&ei=OVHGVLtzCuuP7AaX0YHQBw&ved=0CCcQ6AEwAg#v=onepage&q=emerging%20adulthood%20and%20student%20development&f=false>
- Soledad, R. G. M., Carolina, T. V., Adelina, G. C. M., & Fernanda, P. F. M. (2012). The student adaptation to college questionnaire (SACQ) for use with Spanish students. *Psychological Reports: Measures & Statistics, 111*(2), 624-640. doi:10.2466/08.10.20.PR0.111.5.624-640
- Sommer, M. M. (2013). *Psychosocial factors predicting the adjustment and academic performance of university students* (Unpublished doctoral dissertation). University of South Africa, Pretoria.
- Spitzlinger, R. (2010). *Mixed method research: Qualitative comparative analysis*. Munich, Germany: GRIN. Retrieved from [http://books.google.co.za/books?id=TpEJkhzcDZgC&dq=mixed+methods+research&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=TpEJkhzcDZgC&dq=mixed+methods+research&source=gbs_navlinks_s)

- Stage, F. K., & Hubbard, S. M. (2012). *Linking theory to practice – Case studies for working with college students*. Retrieved from [https://books.google.co.za/books?id=HuvFBQAAQBAJ&dq=perry%27s+theory+of+cognitive+development&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=HuvFBQAAQBAJ&dq=perry%27s+theory+of+cognitive+development&source=gbs_navlinks_s)
- Stangor, C. (2001). *Research methods for the behavioural sciences*. Belmont, CA: Wadsworth Cengage Learning.
- Stelljes, A. D. (2008). *Service-learning and community engagement: Cognitive developmental long-term social concern*. Retrieved from [https://books.google.co.za/books?id=vv9BJ2q\\_kXQC&dq=William+Perry+cognitive+development&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=vv9BJ2q_kXQC&dq=William+Perry+cognitive+development&source=gbs_navlinks_s)
- Strydom, F., Kuh, G., & Mentz, M. (2010). Enhancing success in South Africa's higher education: Measuring student engagement. *Acta Acadamica*, 42(1), 259-278. Retrieved from <http://reference.sabinet.co.za/document/EJC15471>
- Subrahmanyam, K., & Smahel, D. (2010). *Digital youth: The role of media in development*. Retrieved from <https://books.google.co.za/books?isbn=1441962786>
- Sugarman, L., (2004). *Life-span development: Frameworks, accounts and strategies*. Retrieved from [https://books.google.co.za/books?id=Ya4EAQAAQB\\_AJ&dq=life+span+development+approach&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=Ya4EAQAAQB_AJ&dq=life+span+development+approach&source=gbs_navlinks_s)
- Tashakkori, A., & Teddlie, C. (2010). *Handbook of mixed methods in social and behavioural research*. Retrieved from [http://books.google.co.za/books?id=v4wJF5hZhKgC&dq=mixed+methods+research&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=v4wJF5hZhKgC&dq=mixed+methods+research&source=gbs_navlinks_s)
- Tavakol, M., & Dennick, R. (2011). Making sense of Cronbach's alpha. *International Journal of Medical Education*, 2, 53-55. doi:10.5116/ijme.4dfb.8dfd
- Taylor, G. R. (2005). *Integrating quantitative and qualitative methods in research*. Retrieved from [http://books.google.co.za/books?id=l7WJTcbxcmQC&dq=advantages+and+disadvantages+of+quantitative+research+methods&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=l7WJTcbxcmQC&dq=advantages+and+disadvantages+of+quantitative+research+methods&source=gbs_navlinks_s)
- Teddlie, C., & Yu, F. (2007). Mixed methods sampling: A typology with examples. *Journal of Mixed Methods Research*, 1(1), 77-100. doi:10.1177/2345678906292430

- Thomas, L., & Quinn, J. (2007). *First-generation entry into higher education: An international study*. Retrieved from [https://books.google.co.za/books?id=Os2W9zvKSEcC&dq=social+isolation+first+generation+students&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=Os2W9zvKSEcC&dq=social+isolation+first+generation+students&source=gbs_navlinks_s)
- Thomas, P., Porfilio, B. J., Gorlewski, J., & Carr, P. R. (2014). *Social context reform: A pedagogy of equity and opportunity*. Retrieved from [https://books.google.co.za/books?id=6rTcAwAAQBAJ&dq=social+isolation+first+generation+students&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=6rTcAwAAQBAJ&dq=social+isolation+first+generation+students&source=gbs_navlinks_s)
- Tinto, V. (1975). Dropout from higher education: A theoretical synthesis of recent research. *Review of Educational Research*, 45(1), 89-125. Retrieved from <http://api.ning.com/files/TpH3GRQjXIPqeobQGGvb6I0xnrYDw8NPwB47L4sZcdN6XImBwxgMkPT4jIIWs6nUTNmKxoDtpyZmrc2sKb-Bt3myN465QPfs/DropoutfromHigherEducationATheoreticalSynthesisofRecentResearch.pdf>
- Tinto, V. (2007). Research and practice of student retention: What next? *Journal of College Student Retention*, 8(1), 1-19. Retrieved from [http://www.uaa.alaska.edu/governance/facultysenate/upload/JCSR\\_Tinto\\_2006-07\\_Retention.pdf](http://www.uaa.alaska.edu/governance/facultysenate/upload/JCSR_Tinto_2006-07_Retention.pdf)
- Twenge, J. M. (2006). Generation me: Why today's young Americans are more confident, assertive and entitled: And more miserable than ever before. *American Journal of Psychology*, 121(4), 675-682. Retrieved from <http://www.jstor.org/stable/20445493>
- Tynjala, P., Stenström, M., & Saarnivaara, M. (2012). *Transitions and transformations in learning and education*. Retrieved from <https://books.google.co.za/books?isbn=0470926791>
- Van Schalkwyk, S. C. (2008). Crossing discourse boundaries: Students' diverse realities when negotiating entry into knowledge communities. *South African Journal of Higher Education*, 21(7), 954-968. Retrieved from <http://www.ajol.info/index.php/sajhe/article/view/25754>
- VanderStoep, S. W., & Johnson, D. D. (2008). *Research methods for everyday life: Blending qualitative and quantitative approaches*. Retrieved from [http://books.google.co.za/books?id=CpUIzM1UdgIC&dq=quantitative+research+advantages+and+disadvantages&source=gbs\\_navlinks\\_s](http://books.google.co.za/books?id=CpUIzM1UdgIC&dq=quantitative+research+advantages+and+disadvantages&source=gbs_navlinks_s)

- Varga-Atkins, T., & O'Brien, M. (2009). From drawings to diagrams: Maintaining researcher control during graphic elicitation in qualitative interviews. *International Journal of Research and Method in Education*, 32(1), 53-67.
- Vygotsky, L. S. (1978). Interaction between learning and development. In Gauvain, M., & Cole, M. (Eds.), *Readings on the development of children* (pp. 29-36). Retrieved from <http://www.psy.cmu.edu/~siegler/vygotsky78.pdf>
- Walker, S., Read, S., & Priest, H. (2013). Use of reflexivity in a mixed-methods study. *Nurse Researcher*, 20(3), 38-43. Retrieved from <http://0-search.ebscohost.com.wagtail.ufs.ac.za/login.aspx?direct=true&db=a9h&AN=84749406&site=ehost-live>
- Waller, T. O. (2009). *A mixed method approach for assessing the adjustment of incoming first-year engineering students in a summer bridge program* (Unpublished doctoral dissertation). Virginia Polytechnic Institute and State University, Blacksburg.
- Ward, L., Siegel, M. J., & Davenport, Z. (2012). *First-generation college students: Understanding and improving the experience from recruitment to commencement*. Retrieved from [https://books.google.co.za/books?id=g6D0pD3KBsMC&dq=adjustment+and+first+generation+students&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=g6D0pD3KBsMC&dq=adjustment+and+first+generation+students&source=gbs_navlinks_s)
- Watts, J., Cockcroft, K., & Duncan, N. (2009). *Developmental psychology*. Retrieved from [https://books.google.co.za/books?id=bDcLIJCL\\_6IC&dq=Erikson,+E.+\(1980\).+Identity+and+the+life+cycle.+New+York:+W.W.+Norton+%26+Company.&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=bDcLIJCL_6IC&dq=Erikson,+E.+(1980).+Identity+and+the+life+cycle.+New+York:+W.W.+Norton+%26+Company.&source=gbs_navlinks_s)
- Weiten, W., Dunn, D., & Hammer, E. (2014). *Psychology applied to modern life: Adjustment in the 21st century*. Retrieved from [http://books.google.co.za/books?id=6urKAgAAQBAJ&printsec=frontcover&dq=books+adjustment+psychology&hl=en&sa=X&ei=ICUWU9v5HKWdyQO\\_uoGgBw&ved=0CEIQ6AEwAQ#v=onepage&q=books%20adjustment%20psychology&f=false](http://books.google.co.za/books?id=6urKAgAAQBAJ&printsec=frontcover&dq=books+adjustment+psychology&hl=en&sa=X&ei=ICUWU9v5HKWdyQO_uoGgBw&ved=0CEIQ6AEwAQ#v=onepage&q=books%20adjustment%20psychology&f=false)
- West, E. J. (2004). Perry's legacy: Models of epistemological development. *Journal of Adult Development*, 11(2), 61-69. doi:1068-0667/04/0400-0061/0
- Westbrook, S. B., & Scott, J. A. (2012). The influence of parents on the persistence decisions of first-generation college students. *Focus on Colleges, Universities, and Schools*, 6(1), 1-

9. Retrieved from <http://www.nationalforum.com/Electronic%20Journal%20Volumes/Westbrook,%20Steven%20Parents%20of%20First-Generation%20College%20Students%20FOCUS%20V6%20N1%202012.pdf>

Whitley, B., & Kite, M. (2009). *The psychology of prejudice and discrimination*. Retrieved from [https://books.google.co.za/books?id=XSJEjl4uZYC&dq=advantages+and+disadvantages+of+self-report+measures&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=XSJEjl4uZYC&dq=advantages+and+disadvantages+of+self-report+measures&source=gbs_navlinks_s)

Wilcox, P., Winn, S., & Fyvie-Gauld, M. (2005). 'It was nothing to do with the university, it was just the people': The role of social support in the first-year experience of higher education. *Studies in Higher Education*, 30(6), 707-722. Retrieved from <http://dx.doi.org/10.1080/03075070500340036>

William, M. K. (2006). *Qualitative validity. Research methods knowledge base*. Retrieved from <http://www.socialresearchmethods.net/kb/qualval.php>

Wilson, M. E., & Wolf-Wendel, L. E. (2005). *College student development theory*. Boston, MA: Pearson.

Winkle-Wagner, R., & Locks, A. M. (2013). *Diversity and inclusion on campus: Supporting racially and ethnically underrepresented students*. Retrieved from <https://books.google.co.za/books?id=1Y6wAAAAQBAJ&printsec=frontcover&dq=Winkle-Wagner+%26+Locks,+2013&hl=en&sa=X&ved=0ahUKEwjlg2-0LbNAhXpK8AKHdnsCCsQ6AEIMjAA#v=onepage&q=Winkle-Wagner%20%26%20Locks%2C%202013&f=false>

Wittenberg, I., & Clinic, T. (2001). Being at university: A time of growth or unbearable stress. *Psychoanalytic Studies*, 3(3/4), 307-312. doi:10.1080/14608950120103604

Wood, K. C., Smith, H., & Grossniklaus, D. (2001). Piaget's stages of cognitive development. In M. Orey (Ed.), *Emerging perspectives on learning, teaching, and technology* (pp. 35-40). Retrieved from <http://projects.coe.uga.edu/epltt/>

Yau, H. K., Sun, H., & Cheng, A. L. F. (2012). Adjusting to university: The Hong Kong experience. *Journal of Higher Education Policy and Management*, 34(1), 15-27. Retrieved from <http://www.tandfonline.com/doi/abs/10.1080/1360080X.2012.642328>

Zastrow, C., & Kirst-Ashman, K. (2009). *Understanding human behaviour and social environment*. Retrieved from [https://books.google.co.za/books?id=2jCCXcJWZmAC&dq=Papalia,+D.+E.,+Olds,+S.+W.,+%26+Feldman+R.+D.+2007.+Human+development.+10th+ed.+Boston:+McGraw+Hill.&source=gbs\\_navlinks\\_s](https://books.google.co.za/books?id=2jCCXcJWZmAC&dq=Papalia,+D.+E.,+Olds,+S.+W.,+%26+Feldman+R.+D.+2007.+Human+development.+10th+ed.+Boston:+McGraw+Hill.&source=gbs_navlinks_s)

Zorotovich, J. R. (2014). *Five dimensions of emerging adulthood: A comparison between students, nonstudents, and college graduates* (Unpublished doctoral dissertation). University of Tennessee, Knoxville.

**APPENDIX A:**

**Ethical Clearance from the Research Ethics Committee of the Faculty of  
the Humanities, University of the Free State**

**APPENDIX B:**

**Consent Forms for Quantitative and Qualitative Sections of the Study**

**APPENDIX C:**  
**Semi-structured Individual Interview Transcriptions**

## **Individual Interview 1: White, Afrikaans, Female, Non-first-generation**

**1.1 Participant:** I am \*, third year Psychology student; I am a white girl and a Christian. Not a first-generation student.

**1.2 Interviewer:** Okay, so let me begin the questions. How did you experience your first year?

**1.3 Participant:** I think what you said about the first-generation definitely played a role, so I knew what to expect. I am an only child, so I couldn't learn from brothers and sisters, but I learnt from my parents' frame of references, as well as from friends that were already at university. The fact that I knew what to expect made things a lot easier - I knew there was a res, I knew you went to class, how everything works, that there aren't teachers but lecturers – and I think if you have that frame of reference, it makes things easier. The biggest adjustment was rather preparing food for yourself, doing your own laundry. Not so sure academically – such as workload and those type of things. To start studying earlier was one thing, but it wasn't like a train smash.

**1.4 Interviewer:** Okay, and do you feel you adjusted well thus far?

**1.5 Participant:** Yes, yes.

**1.6 Interviewer:** Okay and how was the experience at the beginning of the first year for you?

**1.7 Participant:** Well, I live in Limpopo, so it's rather far - 650 km from here. So it was a bit difficult to know that my parents weren't immediately available. The first two weeks I fell on my head and had to get 13 stitches. So that was bad because I didn't know anyone and didn't have a car. My parents then had to come 650 km's far, so that was a bit of a challenge. But the res helped me a lot because you know there is a roommate readily and you know you have a network of support, and you are on campus. So I think if I didn't stay on campus, it would have had a worse impact.

**1.8 Interviewer:** So it was better to live in res?

**1.9 Participant:** Yes.

**1.10 Interviewer:** How would you describe your social adjustment?

**1.11 Participant:** I think also good, because of the res. So the whole time, I had someone to go to – even if it was just the HK. And then with your room mates, you make friends. And then many people come here with friends from school which is also easier. So you still then have something familiar here – which I now didn't have, but at least you make friends quickly.

**1.12 Interviewer:** So friends in class weren't a problem then?

**1.13 Participants:** Yes, I didn't make friends in class very extensively; I think the communication is interesting sometimes. But two of the girls in my class were in my res so we stuck together.

**1.14 Interviewer:** So it was rather friends from res?

**1.15 Participant:** Yes.

**1.16 Interviewer:** Can you describe your personal and emotional adjustment?

**1.17 Participant:** Emotional adjustment was good, the reason being that the HK helped us so well. In my second year it was more difficult for me to return than it was in first year. My dad and I agreed that in your first year, everyone treats you so carefully and asks if you're alright, the HK shows you – "this is here, and this is there, now you should go study, and now you should do res activities". And then in the second year, no one is concerned about you anymore. You take care of yourself. No one picks it up if you feel sick. So again – the first year was good because the HK helped us. Personally, what do mean...

**1.18 Interviewer:** For instance, any psychological, any anxiety about your studies or so...

**1.19 Participant:** Oh, no. I did stage door in my first year – that first year concert that we all have to do. We had to practice for eight weeks, and that took a lot of time. In the evenings we trained from 10:00 – 12:00, and then in the mornings as well sometimes from 06:00 – 07:00. This was rough in the beginning, but afterwards I had so much time. So this really taught me to prioritise – as there was so many things to do in one day, so afterwards everything could fit in nicely. So it was a good thing with regards to that.

**1.20 Interviewer:** So you actually had time left then.

**1.21 Participant:** Yes.

**1.22 Interviewer:** How would you describe your academic adjustment?

**1.23 Participant:** Uhm, very well. In my first year I had a distinction for the average of all my subjects, and again I think it was because my parents were at university. So my father said from the beginning that you build up marks with semester tests, so unfortunately you do go to class. And if you do well in the semester tests, your exams are so much easier. Because someone told me that, I could do well in my first year. But other people whose parents did everything for them at school – like some of my friends, failed their first year. Because they literally came here and thought "Yho, it's a great time!" So I think in that regard your circumstances at home have a great influence, because your parents are able to tell you: "Do this in that way, start out like this". My parents also didn't do everything for me at school; I did my own assignments and learned by myself, so when I got here I could just continue like that. Because other people's parents weren't here.

**1.24 Interviewer:** Do you think it would have been different for you if your dad didn't prepare you like that?

**1.25 Participant:** I would easily have thought "the classes are easy; I can catch up by myself later" or go to class less often, or not feel worried, because the exam is yet to come. So I don't think I would have jumped in and start to work immediately, because of the thought that there still is a lot of time.

**1.26 Interviewer:** So the fact that your parents were at university definitely played a big role.

**1.27 Participant:** For sure. Emotionally I knew what to expect. Many people come here and can't believe everything is so big. And many of the first years – the black first years/first-generation students – didn't know what to expect at all. They were very confused in the beginning. For example, they didn't understand why you have to follow certain steps when you have a problem with something. And with regards to academics – that you can't study the night before and things like that.

**1.28 Interviewer:** Do you think you adjusted better because you are a woman?

**1.29 Participant:** I won't say adjusted better, but I think with regards to academics, we girls tend to work a bit harder. So, both my friends that failed their first years were boys. My dad also said, as he was at university himself, he pays once and then we pay ourselves. So this was definitely a good motivational factor.

**1.30 Interviewer:** Is there any specific coping mechanisms that you used?

**1.31 Participant:** I just start in time, because I tend to stress easily. For example, next week I write three tests, and in first year it was also like this many times. So I just start in time. If I know I start a week beforehand, and I put in everything and are prepared thoroughly – even if I don't do well then, I am fine. Then I know I did my part.

**1.32 Interviewer:** Did you learn something on a personal level from your friends and the ways in which they adjust?

**1.33 Participant:** I can't think about anything specific right now.

## **Individual Interview 2: Black, English, Female, Non-first-generation**

- 2.1 Interviewer:** Okay, start with your name.
- 2.2 Participant:** Okay, I am \*. Second year, non-first-generation varsity, I am black.
- 2.3 Interviewer:** And female.
- 2.4 Participant:** And female.
- 2.5 Interviewer:** Okay the question firstly is how did you experience your first year at university?
- 2.6 Participant:** Pretty fine...I mean its fine when you adjusted properly; it's just that the languages are a bit different, otherwise I am fine.
- 2.7 Interviewer:** Only the languages?
- 2.8 Participant:** Ja.
- 2.9 Interviewer:** Nothing like staying in a new home, financial aspects...
- 2.10 Participant:** Staying in a new home was weird but I adjusted quick. Because my friends are there, so it was not like very bad, but I just missed mom's home cooked meals and just sleeping when I feel like sleeping. Not having to cross night all the time and all the crazy stuff, just I miss that.
- 2.11 Interviewer:** Okay...uhm how do you feel you have adjusted so far?
- 2.12 Participant:** Pretty good, I mean financially wise I have learnt to like control my spending and like time it sort of towards the end of the month - then I can just finish all my money. I know like in two days' time my dad is going to put in money, so I can survive 48 hours, it's not too bad.
- 2.13 Interviewer:** (Laughs). Ja, no it's alright, and uhm...Otherwise classes?
- 2.14 Participant:** Classes are fine, my mom was pretty surprised last year, she was like: "oh okay", so this year I'm trying to upgrade.
- 2.15 Interviewer:** Okay and how did you experience the beginning of your first year?
- 2.16 Participant:** Oh it was very cold.
- 2.17 Interviewer:** Cold?
- 2.18 Participant:** Yes, I am from Maritzburg and it's like a bit coastal, at least our winters are not too cold - it's a bit weird.
- 2.19 Interviewer:** Ahum...

**2.20 Participant:** And I had a seven o'clock class which was never fun, I was always late for that class, uhm no I am not waking up for this one not today. I have adjusted, now it's better, I have picked my classes in a way that sort of works with my mood, so no class before eight o'clock. Everything after eight or nine then I'm like chilled, otherwise ja...

**2.21 Interviewer:** Otherwise it's good?

**2.22 Participant:** Ja.

**2.23 Interviewer:** Okay how would you describe your social adjustment?

**2.24 Participant:** Uhm, it's good. I think it is because when I came here, already two people from my previous school were already here and they knew people and we just kind of started to go crazy - I guess because they are crazy.

**2.25 Interviewer:** So it was not hard to make any friends in class.

**2.26 Participant:** In class yes. Because in class I do not talk, I am there for class, not socialising or anything, but outside of class, if we have projects or group discussions - I will participate. But when it is class time I just sit down and take notes and then I just stand up and just leave.

**2.27 Interviewer:** So you do not have friends in your class now?

**2.28 Participant:** In some classes, but not all of them, just like three out of six classes that I know people in. So do you minus or add people that you stay within the commune? Because if that is the case, I personally know more people in five of my six classes then.

**2.29 Interviewer:** Okay that's alright then. Are you in a hostel?

**2.30 Participant:** No, I am in a commune.

**2.31 Interviewer:** Okay, uhm...and how would you describe your personal and emotional adjustment?

**2.32 Participant:** Not too bad, uhm I mean emotionally I would have been difficult last year because, I stayed at home. I have never been in a boarding school so coming here was a bit weird, but I think it was good-ish...the first two months were horrible, then after that I was fine.

**2.33 Interviewer:** What made it horrible? Being away from home?

**2.34 Participant:** Being away from home and the crazy weather and the school work and there's no one. School - at least I have a framework, here it's like: "do whatever you want, if you want to hand in, hand in but if you don't, like whatever."

**2.35 Interviewer:** It's your responsibility.

**2.36 Participant:** Yeah, so that was a bit difficult.

- 2.37 Interviewer:** Ok, and uhm how would you describe you academic adjustment?
- 2.38 Participant:** It's pretty good, I mean I got two A's and my other subjects are in the 60's, I mean I failed psychology (Laughs). But my predicate was really good so I didn't feel the necessity to study for my exams, I was like: "ahhrg, I am just going to pass this", then I got there and I was like: "ooooohh mother of god" (Laughs), what happened there was crazy. I like, and I knew I was like: "uhm I failed this one", but I am repeating it second semester this year so I will make sure I study for my exams.
- 2.39 Interviewer:** (Laughs) the predicate can't get you through.
- 2.40 Participant:** (Laughs) dude! 79! and then I get there like: "arghhh you failed your exam", I was in KZN the day before we had to write second opportunity and I was like: "today is the fourth , tomorrow is the fifth I can't" - I was like: "next year we will see this one".
- 2.41 Interviewer:** Okay and uhm...otherwise academic adjustment? Classes? Everything?
- 2.42 Participant:** Yeah it's pretty fine.
- 2.43 Interviewer:** Okay and do you feel like you have adjusted better because your parents attended university?
- 2.44 Participant:** Yes! Because they understand the financial side of it that you still need money. Even though they give you money on the 15<sup>th</sup>, I still need money towards the end of the month. At least they get that part so again it's like okay at least.
- 2.45 Interviewer:** Okay did they prepare you for the academic things you could....?
- 2.46 Participant:** Yes, they told me it's going to be crap and if I sleep I am going to fail, they were like: "uhm you fail we kick your ass when you come back to KZN".
- 2.47 Interviewer:** (Laughs) so they did prepare you in a way for university?
- 2.48 Participant:** Mentally but it wasn't a good preparation like: "agrhh it's going to be fun!!" It was more like: "you fail you die!" That is just...
- 2.49 Interviewer:** (Laughs) and do you feel like you have adjusted better because you are female?
- 2.50 Participant:** No...not really..
- 2.51 Interviewer:** Not really?
- 2.52 Interviewer:** Would it be?
- 2.53 Participant:** (laughs) I don't know!! I don't know!!
- 2.54 Interviewer:** Not really?
- 2.55 Participant:** I think because I am female - maybe if I don't have food I don't have an

ego and I like, no I can't ask...I would be like: "Yo! Listen guys for the next few days you will be putting on upgrade, just saying", and I would just go to the fridge and start eating. I really would and my housemates are pretty cool so it's like okay.

**2.56 Interviewer:** That's alright and uhm any specific coping mechanisms that you used in first year?

**2.57 Participant:** Call a lot! At home, like I call my granny like nobody's business. Like Yo! you need some comedy action like granny, she will just start talking like out of nowhere about something that's not...you not even there but she puts you in the picture and you are like: "okay", you start laughing ... sort of forget about whatever you are going through at varsity. But a lot of calls to mom and granny. Ja, that really helps like: "what do you want? How is school?" But granny...comedy central...it's fun!

**2.58 Interviewer:** So you phone home a lot?

**2.59 Participant:** Ja.

**2.60 Interviewer:** Okay, and uhm any psychological angst?

**2.61 Participant:** Psychological what?

**2.62 Interviewer:** Psychological angst, things that make you nervous to be here.

**2.63 Participant:** I was super nervous my first year here, I remember I was like: "I couldn't deal." Campus felt like it was like a hundred kilometres walking from the admin to...yho I just felt like... and everyone looked older and I was like uhm I feel like a 10 year old and everyone was looking at me funny like why are you lost? (Laughs) like why are you lost yho like everyone looked at you funny. Like when I was walking with either him or like my friend, they know where they are going so they do not even tell you, that I turning here they just turn and you still walking, and I am like: "what the hell?"

**2.64 Interviewer:** And then after that?

**2.65 Participant:** No, I think I learnt pretty quick so it was like okay chilled after I got lost a couple of hundred times...I learnt as I went. But I think I learnt quickly because I got lost so much.

**2.66 Interviewer:** (Laughs) Uhm Ja?

**2.67 Participant:** Because I will end up in another building, like: "No, this is North block what are you looking for? Oh psychology it's that side". So next time I had class there I never got lost I know how to get there, so it is chilled.

**2.68 Interviewer:** Okay, so is there anything else that you feel...uhm influenced your adjustment during first year?

**2.69 Participant:** Having a...uhm good boyfriend

**2.70 Interviewer:** (Laughs)

**2.71 Participant:** It helps when you have someone to shout at and vent sort of...and he helps a little here and there, he proof reads stuff and whatever so ja, and maybe at home like being able to have someone you can talk to constantly - not someone whose: "like I can't talk right now."

**2.72 Interviewer:** Having a support system?

**2.73 Participant:** Ja, it's pretty good.

**2.74 Interviewer:** Ok then that's it! Thank you.

### **Individual Interview 3: Black, English, Female, Non-first-generation**

**3.1 Interviewer:** Okay, I am going to start the interview by asking you to state your name, age, your gender, your race and whether or not you are a first-generation student.

**3.2 Participant:** My name is \*. I am 19, I am a female and I am black. I am not a first-generation student.

**3.3 Interviewer:** How did you experience your first year, in general, your first year in university how was it?

**3.4 Participant:** Honestly at first it was as expected. In the sense that my sister went to WITS university and when she got there the treatment was much harder and harsh - so every time she got home she would be like: "Hey, this is what they are making us to do", showing me videos and singing the songs - we would have a laugh about it and sometimes she would call home saying that she has lost her voice because of certain things. So when I got here I knew they were going to treat us, it as expected. And in terms of work load, honestly...uhm when I changed schools back in high school from a private school to a government school, which functioned like a private school as well, I realised the way we did things throughout the public school was similar to how it's done in university. They do not spoon feed you no, they give you your work and they give you an outline, that's basically just it. The rest is in your hands.

**3.5 Interviewer:** So when you say treatment do you mean res people or is it just like university and the lectures as a whole, or is it based on res?

**3.6 Participant:** It's just res.

**3.7 Interviewer:** Is it just res?

**3.8 Participant:** Like the whole first year experience. I feel like with lecturers it's not like they know you. You are just a number once you get to varsity. And it's understandable considering that in a lecture you are like 800 /600, so I cannot blame them. But in res, in terms of treatment I'm talking about the singing, the walking up and down Rag farm and what not.

**3.9 Interviewer:** Okay, and do you think you have adjusted so far? As in from your first year until now, do you feel like you have adjusted and how long did it take you to adjust during your first year?

**3.10 Participant:** I don't think I adjusted in my first year. But it's only now that I can say: "Okay, I am finally starting to accept the situation at hand". Because last year I remember at this time I would have gone to Johannesburg or home about three times, and considering that it's only March and then now I am only going home for the first time, this time tonight. So basically I can say I am working on it, I am growing. But home will always be home, so eventually you will have to think about the money that your parents are spending on bus tickets and what not and you will adjust somehow, somewhere you just have to.

**3.11 Interviewer:** How would you say...what would you say was the hardest thing about leaving home, what was the most hardest?

**3.12 Participants:** Uhm...Apart from my bed I could say my parents, my parents.

**3.13 Interviewer:** Did you miss your parents a lot when you were first year?

**3.14 Participant:** Yeah, because even though I spent most of my life in high school in a hostel, every time I got home for weekends I am used to my dad walking past my room, waking me up and my mom also waking me up like ten minutes after my dad woke me up, telling me that breakfast is ready and that whole process. Watching TV with them and the little stupid arguments, every single thing, oh ja, and my little sister too.

**3.15 Interviewer:** So that was the hardest thing, and how did you experience the beginning of your first year, let me say the first few days you were in university and how long did it take you to accept and...

**3.16 Participant:** Is it in terms of classes or in terms of...

**3.17 Interviewer:** In general, in terms of everything, your first few days in university?

**3.18 Participant:** I was actually excited hey. The first few days, I remember I got here on the 22 of January, it was my sister's birthday when I got here. Uhm, we had athletics, so basically I was really excited, making so many friends and seeing so many faces. But honestly it scared me, because you will never know what lies ahead and of all the stories that you hear about people getting kicked out of varsity, this and that, and the pressure that arises as time goes by. So I was excited and at the same time scared.

**3.19 Interviewer:** What was your biggest fear?

**3.20 Participant:** My biggest fear was failing.

**3.21 Interviewer:** Failing in life in general or failing academically?

**3.22 Participant:** Failing academics, in life what I understand is that there will always be a plan B, you can always rectify that mistake. But in academics if you fail, yes you will get a second opportunity to correct that mistake but once you mess up the second time, you don't get another opportunity.

**3.23 Interviewer:** So that was your biggest fear? Failure? Understandable. And your social adjustment? How would you describe that in your first year?

**3.24 Participant:** Oh gosh I have so many friends!

**3.25 Interviewer:** Really?

**3.26 Participant:** I have so many friends, last year my roommate actually complained, because people were always in my room at odd hours of the night - eventually it became that thing of I can adjust with different personalities I can be quiet sometimes, I can be loud sometimes, sometimes I can just be social, but then not too social or little social, so basically in terms of social, I am very social, I have so many friends, oh my goodness!

**3.27 Interviewer:** So it's easy for you to make friends, would you say it's easy for you to make friends or do you find it sometimes difficult?

**3.28 Participant:** It's easy for me to make friends, because basically I will not judge people for who they are, for example let's just say I meet someone who is a lesbian, and everyone is like: "No, I am scared the person will end up asking me out". I don't care about such. I am upfront with the person about me being lesbian or not, then I feel like the person will not make a move, but if I keep it a secret - "I like girls, I like guys" - the person will eventually make a move. So basically I do not judge, okay, I do but not... everyone judges but there are certain things that I can adjust to and accept them the way they are.

**3.29 Interviewer:** So do you have friends in class or just res?

**3.30 Participant:** Everywhere, in class, in res, on campus randomly, some people I don't even have classes with. When I am walking to the bridge, let's say I take a first year to walk me to the bridge, I am always waving and then the first year would be like: "I am never walking with you again, you know everyone."

**3.31 Interviewer:** I get that, and your academics how would you describe that, how would you say you have adjusted in terms of academics? How is it going with your academics?

**3.32 Participant:** Okay, compared to first year I just winged everything. The aim was to just pass, and just pass regardless of how much you got. Because when I got here, I still had that mentality where everyone kept on telling you: "When you get to varsity, if you get a 50% just celebrate". So when I got here I got like fifties and I would celebrate. I wouldn't focus at trying to improve my marks - but focus on passing which was my biggest mistake. But then this year I changed courses, I am still doing B.Sc, but from genetics to food science. I realised that once you apply yourself and stop thinking about passing but giving it your all, you actually start enjoying it and do really good.

**3.33 Interviewer:** Uhm, that is good. And do you feel like you adjusted better because your parents went to varsity? Or would it have been the same if they didn't go to varsity?

**3.34 Participant:** I think I adjusted better because they did go to varsity.

**3.35 Interviewer:** Why?

**3.36 Participant:** Thing is since high school, like matric basically, when you get home my mom would be like: "If you do not work hard, no varsity is going to take you for this", this and that. And then I was like: "okay", started working hard, got accepted into certain varsities. Fine after first year, okay let's just say in June when the results come out I get home, I show them my marks. And then they would be like: "Ja, I understand it's going to be different, it's going to be tough from what I experienced. But still this is what you can do; get tutors, things are available for you." They know everything, they know where I should go if I need help. Unlike someone whose parents didn't go to varsity. They are just happy with whatever comes home, they do not care.

**3.37 Interviewer:** So you would say, in a nutshell, they prepared you?

**3.38 Participant:** Ja

**3.39 Interviewer:** Okay, and uhm do you feel like you adjusted better because you are female, or maybe you think if you were male it would be more difficult?

**3.40 Participant:** Honestly I think it is the same, it's the same. It is like when we get practicals, we are mixed in a group, it's all guys and girls. When we have projects - same thing, practicals same thing. Even the online tests everyone has a different thing. So we all have the same, or equal share, of labour and what not.

**3.41 Interviewer:** So \*, last words. What coping mechanisms did you use? Do you have any coping mechanisms when you were first year that made it better for you to be here, and how was that?

**3.42 Participant:** Uhm...Honestly, first of all by learning how to save my money financially. I realised I will not miss home that much. Because when I was at home, you could get anything you want. But now that you are here you have to care for yourselves. You are living on a salary, a stable month to month. So basically the amount I got in January had to last until month end and same thing, same thing. So after doing that I started saving up. And then every time I missed home, I would go to the mall, buy something to make me happy.

**3.43 Interviewer:** To make you feel better? Retail therapy?

**3.44 Participant:** Ja, when I came back maybe listen to music and dance around a little.

**3.45 Interviewer:** So you would say your coping mechanism was just to make you feel better?

**3.46 Participant:** Sometimes I would call my parents and talk to them and be like: "I miss you guys". But then my dad actually tried something different. He resulted [revolted] . He spoke to my mom about this. He was like: "if she calls more than two times a day do not pick up. Only pick up the first time and the second time, do not make the conversations too long." So now I talk to my dad in the mornings and in the evenings. During the day he will sometimes call just to check up on me. But if I call him more than twice, he will not pick up. I will call 70 times, he will not pick up. They never pick up. Because they say the more I talk to them, the more I long to see them. So by them being a bit distant they are giving me some time and space to grow and listen to what I really want to do.

**3.47 Interviewer:** Do they still do that now that you are second year, and do you feel like you still miss them as much as you did when you were doing your first year?

**3.48 Participant:** Not really, because in my first year whenever things got tough I didn't know where to go, so I would just call mommy and daddy and started crying. So this year when things get tough I am like: "I need to shape up and stop being a sissy." Basically I know my parents will not be here for the rest of my life. So at some point I also need to start acting independently and stop with the mentality of thinking I am independent without showing it.

**3.49 Interviewer:** And would you say you have grown now, from how you were during your first year and how you are now?

**3.50 Participant:** Ja.

**3.51 Interviewer:** Ok thank you \*.



## **Individual Interview 4: Black, English, Female, Non-first-generation**

**4.1 Interviewer:** Okay, I am going to start by asking your name, your age and whether you are first-generation or not, and your race and, ja that kind of information. So start by stating those things.

**4.2 Participant:** Okay, my name is \*, surname \*. I am 21 years old and I am not a first-generation student and I am black.

**4.3 Interviewer:** Okay how did you experience your first year? Think back to your first year, how did you experience university in your first year?

**4.4 Participant:** Well, being a first year, most especially being a residence student, was kind of difficult and fun at the same time. I have some memories. The difficulties were when it came to diversity, diversity was the biggest problem. They tried so hard to make interactions and connections with first years and everything but we just couldn't find ourselves on the same level as other races, there always had to be some, let me say, some invisible borderline, ja, something like that.

**4.5 Interviewer:** So would you say that was a factor when you were first year?

**4.6 Participant:** Yes, that was a factor because you would find some people from my race, mostly, would not want to go to the...what do you call them "inters". Because they felt like they were not included somehow only a certain group of people where catered for and everything, yes.

**4.7 Interviewer:** So would you say coming to university that was the first challenge that you had?

**4.8 Participant:** Ja, I think that was the first challenge I got because it was during those first Rag weeks, academics had not started by then.

**4.9 Interviewer:** So where you come from, how do people see race and what are the challenges there?

**4.10 Participant:** Where I come from everything is normal, I am from Bloemfontein. I went to school with white people. I did not experience racial inequalities as much as I did here. When I got here it was a different thing.

**4.11 Interviewer:** So that was your major problem?

**4.12 Participant:** Yes that was my major problem.

**4.13 Interviewer:** So from your first year and now, how have things been? How have you adjusted?

**4.14 Participant:** Well I would say I have adjusted, because last year I was kind of observing during my first year. I was the quiet one, like now I am like fine, I have adjusted.

**4.15 Interviewer:** So from first year you would say...

**4.16 Participant:** Ja, everything is better now. I think I have opened up to a lot of things. I am kind of like getting in there.

**4.17 Interviewer:** That's good, and how did you experience the beginning of your first year, your first few weeks or let me say days here, how where they and how did you experience them?

**4.18 Participant:** Oh, they were busy, hectic. There are days where I look back now and I can say they were memories made. But, at like that time I was like: "hate being here. I do not want to be here, I want to go back home". But I got used to it, now I look back and think like, yeah memories made.

**4.19 Interviewer:** How long did it take you to accept everything?

**4.20 Participant:** Like until I got my first privileges. That is when I felt like: "okay everything is going well now." It was around May I think.

**4.21 Interviewer:** Would you say res was challenging for you, or outside res was also challenging. How did you experience the university itself?

**4.22 Participant:** I would say both. Because I had res activities and I had academics this side, so there was kind of like conflict. Some pulling others down, I would say both. I found challenges both sides. Because university you have to adjust to new systems, it is not high school anymore. But then I got used to it.

**4.23 Interviewer:** So I hear that you are from Bloemfontein, what made you decide to move away from home and stay in a koshuis?

**4.24 Participant:** Actually I am in the rectors program. So he was like: "I think you guys should come stay here". Because he was sponsoring our school, he was in connection with my high school. So he was like: "if you pass this way I am going to take you. I want you guys to stay here on campus where I can see you, where I can put my eye on you guys."

**4.25 Interviewer:** So how has that been for you, moving from home and staying here, is it much different?

**4.26 Participant:** I think I felt the difference in a sense that, changing environments. Because when I first got here, like the first week I was very sick, allergies and stuff. And then they were like: "I think it is adjusting to a new environment." So it was difficult, but I got used to it. I got medical treatment and everything went well.

**4.27 Interviewer:** So...uhm moving from home, what was the biggest challenge?

**4.28 Participant:** Moving from home?

**4.29 Interviewer:** Leaving your parents and coming here.

**4.30 Participant:** The biggest challenge? The support that I am used to get, because I am the only child living with both my parents at home. So having to leave that gap between us, I felt that something was missing. I felt the gap, yes.

**4.31 Interviewer:** So...uhm how has your social adjustment been, so in terms of friends and social life?

**4.32 Participant:** In first year, I came with \* because we are from the same high school and stuff. So I was with her all the time, so I haven't really changed. But then I think second semester last year that is when I got to talk to other people, make new friends you see. I made new friends, some we just did not get along, but I still have that circle of people, a group of people that I am still with, who I think I click very well with.

**4.33 Interviewer:** And outside res do you have any other friends, outside res?

**4.34 Participant:** From campus?

**4.35 Interviewer:** Yes from classes...

**4.36 Participant:** No I only made friends in res, I don't have friends in classes. I go to classes alone, ja. I only associate with them during group assignments.

**4.37 Interviewer:** Why is that? Is it hard to make friends in class or did you just decide not to make friends?

**4.38 Participant:** Ja, I just decided not to make friends, you know when it comes to academics you don't want that kind of thing. So I was like: "Res friends, that is enough. Academics; I am on my own."

**4.39 Interviewer:** Okay and financially? How do you feel financially, have you adjusted financially, being independent and all?

**4.40 Participant:** Well financially I haven't adjusted because I call my parents all of the time, like: "I need this, I need that." I still need to work that out, that one out, because I haven't adjusted, seriously.

**4.41 Interviewer:** What is challenging? Are you spending too much?

**4.42 Participant:** I think I am spending too much, you will be like: "Okay I am drawing up a budget one, two three", but you end up buying this and that - unnecessary stuff.

**4.43 Interviewer:** So was it hard in your first year or has it improved?

**4.44 Participant:** I would say it has improved, a lot. It has improved. You learn with time.

**4.45 Interviewer:** And with your academics? How is your academic adjustment?

**4.46 Participant:** I started out on a very bad patch; it was not well. You are adjusting from high school, spoon feeding and everything. And then you are here. You are on your own, you do it or you don't do it - nobody cares. I am used to that "Do it, do it! Do it!" So I was much more relaxed. After first semester I was like: "Okay \*, you have to pull up your socks". That is when I realised that you have to work hard. But now I think I have adjusted, I am fully adjusted.

**4.47 Interviewer:** So second year is better that it was in your first year?

**4.48 Participant:** Ja, than when I first got here.

**4.49 Interviewer:** Do you feel like you adjusted better because your parents went to university or...?

**4.50 Participant:** No it is not because of that. They were not like: “\* , you are at university now, you have to act like this, we have been there”. They were like: “This is university, now go do your things.” We all know how university is. Just go there; you know why you are there. You have to study and do that and do this. We all know there is that life, the fun life, the friends life, whatever, but always keep in mind why you are there. Have a reason why you are in university in the first place.

**4.51 Interviewer:** So would you say that prepared you?

**4.52 Participant:** Ja, that prepared me, because they were not like, “you know I know this, don’t do this, do that, I have been there”. And you would be like, “you do not want me to do that? I am going to try it out.” So they were like, “we know how it is, just know that you are there for education, get your degree, we know there is going to be this, there is going to be that. Do not let it interfere with your academics”.

**4.53 Interviewer:** And so you feel like you adjusted better because you are female? Or if you were male it would be sort of the same?

**4.54 Participant:** I think with males it would have been better. It is better with males because they are those people who feel free around each other. Even when they come to me, you feel like I do not know this guy but he is still free around me. Males I feel like they adjust quickly than we do.

**4.55 Interviewer:** So overall if you would talk about your first year what would you say? Overall? Now comparing with second year? What would you say were you biggest challenges, including res and the university?

**4.56 Participant:** I would say that the biggest challenge was the university. Classes, from the first day, you get your timetable you do not know how to work it out. It was...looking back now I would say it prepared me for the coming years. Because when I was in first year I was miserable, I was like, “I do not want to do this, I want to go back home.” But now like ja, it’s fine. Academics were killing me, I did not understand a thing, I got lost. Everything was just too fast for me. But like now I feel like I adjusted, everything is fine. The only problem was...I think adjusting was the only problem. Because everything was too fast for me and it was only like, “I just got here just slow down.”

**4.57 Interviewer:** It took you some time to adjust to things. And would you say now, the res issue that you spoke about, would you say it has improved or is it still the same as when you got here?

**4.58 Participant:** I think it has improved in a way, it has improved. But you still spot that small thing that just happens, but it’s fine. But it has improved. You can see a lot of difference now.

**4.59 Interviewer:** And with your first year, what would you say your coping mechanisms were? What did you do to cope with the pressure of being in varsity?

**4.50 Participant:** You know what? I just told myself that, “you know what (sorry about what I am about to say), I was like screw everything I am just here, I am just going to class, do my assignments do my work. I do not care about the rest.” That is how I coped, I was like: “I am not going to let that affect me, screw that, screw this I am just going to focus on what I have to do.”

**4.51 Interviewer:** \* that is the end of our interview, Thank you.

## **Individual Interview 5: Black, English, Female, First-generation**

**5.1 Interviewer:** Okay, I am going to start by asking you to tell your name, your age, and whether or not you are a first-generation student and your race.

**5.2 Participant:** Okay, I am \*. I am 21 years old, I am a first-generation student and I am black.

**5.3 Interviewer:** Okay, how did you experience your first year? How was it for you, the whole of first year in general?

**5.4 Participant:** Uhm...my whole of first year was...uhm very challenging for me in terms of academics because then I...It is quite different from what we are used to in high school. And I did not have all the necessary information for my course. So that was very challenging, but then with the help of, like getting an academic mom from res. That helped me and ja. I think academics were the most challenging thing. But socially and whatever it was a great experience.

**5.5 Interviewer:** And leaving home? how was that for you?

**5.6 Participant:** It was fine; I am actually used to not living at home. So it's not really...

**5.7 Interviewer:** Oh were you in boarding school?

**5.8 Participant:** Yes I was in boarding school.

**5.9 Interviewer:** So was it your decision to move from home and...You are from Bloemfontein right?

**5.10 Participant:** Yes.

**5.11 Interviewer:** So you moved from home and decided to stay in res?

**5.12 Participant:** Ja, I wanted to stay in res because of...Sorry I am so nervous.

**5.13 Interviewer:** No, no it's fine (Laughs). Why are you nervous, is it because of the recorder?

**5.14 Participant:** No...I am just an awkward person (Laughs)

**5.15 Interviewer:** I am awkward too, so let us just breathe in, pretend that you are talking to a friend.

**5.16 Participant:** Okay, I moved to res because at home I cannot study, it is not a good studying environment, so I study better here. I am exposed to...Like it is convenient for me to be here, like when I have late classes I don't have to travel by taxi every day and whatever, so ja.

**5.17 Interviewer:** So how do you feel about leaving your parents at home?

**5.18 Participant:** It is sad, I miss my parents, and I miss my mom and my sister. But I know why I am here and what I am here for, so I have to focus on that, ja.

**5.19 Interviewer:** So I am going to take you back to your first few days, or weeks, at university, when you first got here. How was the experience? How did you feel?

**5.20 Participant:** It was very hard (Laughs). It was very hard, it was hard because now I had to...okay the school that I was in, was not...okay I am going to talk about race now. Okay it was not...it was mostly black people neh? And when I got here I was mostly surrounded by white people, so it is hard to like make friends for me and ja that was just it. And to communicate with them, it's a bit...because we always had this mind-set in our minds that they are different from us, so that made it very awkward and whatever. And once you get to know them it really got better.

**5.21 Interviewer:** Do you think it has changed from your first year until now, how have you experienced the whole race thing?

**5.22 Participant:** (Laughs) I am going to be honest neh?

**5.23 Interviewer:** Yes be honest.

**5.24 Participant:** When like, I always tell my friends that I never knew I was 'black' until I got here (laughs). Because you can actually feel it when you are here, like okay, there is just that separation thing, where ...okay I never thought it would be like this because, I thought we would all be friends with white people. Because I have regarded black people being friends with white people, but when you are actually here... it's like - no you cannot actually. So black people stick with black people and white people stick with white people and that is not like ....it is difficult and it is still like that.

**5.25 Interviewer:** In your second year? So you wouldn't say it is different?

**5.26 Participant:** It is not different.

**5.27 Interviewer:** Tell me about your social adjustment, since we are talking about friendship. Tell me about your social adjustment. Have you been able to make friends? Where have you been making friends, how was that whole experience? Were you able to make friends quickly?

**5.28 Participant:** The only friends that I made in my first year were in res. On campus I do not have any friends. There is literally one person that I know from my faculty and whatever - that I am always with. Otherwise I do not know any other people.

**5.29 Interviewer:** Is it hard to make friends in class?

**5.30 Participant:** It is really hard!

**5.31 Interviewer:** Why is it hard?

**5.32 Participant:** I think it is my personality, I do not think it is...For everyone else I think it is easy but my personality is very...I do not know, but I find it very difficult to make friends.

- 5.33 Interviewer:** But making friends at res?
- 5.34 Participant:** It is easier because I live with them. I think we have a lot more in common and I am closer to them and more exposed to them, that is why I get to relate to them easier. Rather than on campus, ja.
- 5.35 Interviewer:** Do you feel like you have enough friends? And how do you feel about your social life, is that enough for you?
- 5.36 Participant:** Ja, I feel like I have enough friends, ja that is enough really I am not a ...I am not big on friends, ja. So I feel like the friends that I have from res and the ones back home are fine.
- 5.37 Interviewer:** So socially in university, you have socially adjusted?
- 5.38 Participant:** Yes I have.
- 5.39 Interviewer:** And your academics? Let's talk about your academics. What was the difference from high school to first year? And how is it now looking back?
- 5.40 Participant:** I think in high school you are like...it is like they are holding your hand every step of the way, because if you do not do your homework then the teacher is on your case, "why are you not doing your homework, why are you not doing it." Here if you do not do your assignment, no one is going to ask you why you didn't do it, or give you a second chance. So it is like here you have to do it and you have to get your priorities straight. You have to know why you are here and whatever. In high school they are spoon feeding you, here there is no such, ja.
- 5.41 Interviewer:** So how have you been coping academically, do you feel you have adjusted yet?
- 5.42 Participant:** I have...this year I have really. Last year it was difficult for me. Because I was just like...I think I was caught in-between on being spoon fed thing, now I did not know how to deal with not being spoon fed. But now I can say that I have adjusted and my academics are going well.
- 5.43 Interviewer:** That is good. And do you feel like if your parents did go to university, it would have prepared you or it does not make any difference for you?
- 5.44 Participant:** Uhm...I do not think it would have made any difference, really no.
- 5.45 Interviewer:** Have they been giving you the outmost support?
- 5.46 Participant:** Ja, my mom has been giving me some support she is with me every step of the way, ja.
- 5.47 Interviewer:** Overall first year, if I would ask you to describe your first year, how would you say it was and comparing it to now your second year?

**5.48 Participant:** (Laughs) Okay when I consider the fun...the social side of it, it was really great! Compared to now, we had like “inters” and the rag thing, I really enjoyed all those. And then now we do not have any of those, so it is like, “oh okay.” And then academically my first year was difficult for me. It was difficult and ja, that is it.

**5.49 Interviewer:** So this year academically you are improving.

**5.50 Participant:** Ja, I really...It joo...it makes me happy speaking about it because I have really, I have really improved. I am more focused now and, ja.

**5.51 Interviewer:** So you would say you adjusted better than you were last year.

**5.52 Interviewer:** And your finances? Was that a difficult thing to adjust to in your first year, are you used to handling your own finances now?

**5.53 Participant:** I am used to handling my own....I am lying (laughing). I do not know anything about these stuff, my mom usually handles my finances. I do not know anything about it really.

**5.54 Interviewer:** No, no I mean your salary now. Not your salary your allowance

**5.55 Participant:** Allowance? Oh no, ja, I am lying this year I cannot save. Last year I could use my finances really well. This year I do not know what is going on, I am just a mess. My money is just...I do not know what I am doing with it, it’s a mess. I think I am over spending this year, I do not know, compared to last year.

**5.56 Interviewer:** So last year you were very conscious about your money?

**5.57 Participant:** I was.

**5.58 Interviewer:** So this year that is out of the window?

**5.59 Participant:** (Laughs) Ja.

**5.60 Interviewer:** Are you planning to go back to where you were last year or are you just fine with over spending?

**5.61 Participant:** No, I am not fine, because I end up being broke and whatever, so I really want to go back to being conscious and budgeting and stuff, ja.

**5.62 Interviewer:** And if you were a guy, do you think guys have it better? Ja, do you think guys have it better in terms of adjusting to new environment or do you think everything is the same?

**5.63 Participant:** I think guys have it better.

**5.64 Interviewer:** Why?

**5.65 Participant:** (Laughs) Okay this is from my own experience, this is what I have experienced. With guys it is like, if you get a group of guys and then there is one guy, he can easily go to them and ask them about something or whatever... whereas with girls, I will get

you sitting there and I will just sit here, and we will both either be on our phones and whatever, we won't even talk and I will not even greet you. It is like that with girls, that are always the case that I always experience. But with guys they just gel easier so ja, I think they have it easier.

**5.66 Interviewer:** And what did you use during your first year to cope with everything, with the challenges and the new environment? What would you say your coping mechanisms were?

**5.67 Participant:** Oh okay, last year when I couldn't cope I went to the psychologist here on campus and they helped me with like time management and stuff. I went to like a few self-esteem classes and learnt how to make friends and stuff. It worked out for me but it is not me, I am not into having a lot of friends, so that helped. They taught me a lot of time management skills and all that.

**5.68 Interviewer:** So you say going to see someone helped?

**5.69 Participant:** Ja, it did.

**5.70 Interviewer:** And with missing home, how did you deal with that?

**5.71 Participant:** uhm...I called my parents. My mom often, and I went home more often rather than staying here. Like on weekends, I would go home.

**5.72 Interviewer:** So for you it was easier to go home?

**5.73 Participant:** Ja it was easier.

**5.74 Interviewer:** Oh ok thank you \*.

## **Individual Interview 6: Black, English, Female, First-generation**

**6.1 Interviewer:** I am just going to ask you to state your name, your age, your race and whether or not you are a first-generation student.

**6.2 Participant:** My name is \*, I am 19 years old, I am white and I am a first-generation student.

**6.3 Interviewer:** Okay, so how did you experience your first year in general?

**6.4 Participant:** Well, it was a totally new experience; coming in here the work is way more than matric. So I think it is fun, it is fun meeting new people. Because I mean especially if you are in a residence you meet so many different cultures, different people and ja, that was nice.

**6.5 Interviewer:** So what was the biggest challenge for you about leaving home and coming to a new environment?

**6.6 Participant:** I think it is becoming more independent, because you do not see your parents everyday any more. I think it was the work load, the work load was a huge challenge because it is way more than matric, so you have to learn how to summarise every day, study on your own, so ja.

**6.7 Interviewer:** So would you say you missed your parents when you were doing your first year?

**6.8 Participant:** I think the first few months yes, I think the first few months I missed my parents. But now it's actually like...I like becoming more independent because I can actually see that, "okay you can stand on your own two feet", so that is nice.

**6.9 Interviewer:** So take me back to your first weeks or first days in university.

**6.10 Participant:** In first year?

**6.11 Interviewer:** Yes in first year, how was it? How did you experience it?

**6.12 Participant:** Well we got here and then we got...uhm what's 'sot'? Inaugurated, ja. We were inaugurated our first week, it was Rag so we were very busy, like there were no studies going on at the moment. So that was just basically meeting your fellow first years in residence. Then after that we started with classes and that was very challenging because then it is huge classes, like we in matric I think you are 30 people in a class. Here studying Law you are 300 in a class. So it is uhm...and the thing within matric you had relationships with your teachers, and then here you do not actually have a relationship with your lecturer and here they do not mind if you do not come to class. So it is very independent, you have to decide on your own if you are going to class or you need to study. So it is very self-discipline.

**6.13 Interviewer:** And speaking about friends, how is your social adjustment been, from first year until now your second year?

**6.14 Participant:** For me social adjustment was not that big because I am a social person, so I actually get along with people very well and I have made great friends in res, like friends for life. And I think the friends I made last year are still my friends now so, ja.

**6.15 Interviewer:** So in class was it hard to make friends or...

**6.16 Participant:** Oh no not at all, because you are at residence you meet people who study with you so you go to class with them. Then when we went to class, you meet other people with the same interests as you, so we now we actually a big group in class that we do tasks together and things, so no, social adjustment was not that big because I like communicating with people so.

**6.17 Interviewer:** Even when you were first year?

**6.18 Participant:** Even when I was first year ja.

**6.19 Interviewer:** That is interesting and your academics how did that go?

**6.20 Participant:** Academics. My first year was actually surprisingly well, I thought...uhm...no the first six months were a bit...I never failed anything but I think the first few months were a bit challenging, like the first test, then you are like, “oh my word!, Is this how they ask questions?”. And then my second...at the end of the year I had...how many...four distinctions in my first year. So I actually, I think it actually helped me to study on my own and stuff, so ja...I am excited about this year. This is also more work than last year, but now I think the adjustment to the amount of work, I can handle now.

**6.21 Interviewer:** Great! And do you feel like it is easier for you to adjust...is it better now that you are second year to adjust to the work load?

**6.22 Participant:** Yes, I think it takes you the first half of your first year to adjust to the work, so I think your second year you are used to the amount of work, you are used to going to classes, you are used to how the lectures give classes. They do not spoon feed you. Matric they used to kind of spoon feed you. So I am used to not getting spoon fed and doing your own research and going out. They do not tell you - okay, they don't remind you – “okay remembers your task”, everything is on your own.

**6.23 Interviewer:** So second year is much better than your first year?

**6.24 Participant:** I feel that it is much better, the work is just a bit more, but I feel like it is getting better because I know what to do now.

**6.25 Interviewer:** And with your finances? Now that you're independent, how are handling your allowance, how is that going?

**6.26 Participant:** My allowance, I only get a specific amount from my parents. So I think in the first twenty days of the months it finishes, because it goes to like, let's say groceries and it goes to toiletries, like I always leave a bit for eating out with my friends, and birthdays. Because there's a birthday every month, so I have to buy presents. And the petrol, the petrol because I drive home, let's say two weekends a month I go home, so that also. But like the money, I get by. So no, it's fine.

**6.27 Interviewer:** And when you were in first year were you able to...

**6.28 Participant:** Yes, first year is actually challenging because you're used to your parents buying everything for you...so what I learned is to make up lists, my dad told me to make a budget. Because in my first year I think I went a bit overboard, because you're like: "Oh yeah, I got money, I can buy what I want". And I think then my dad saw like, no, no you got to make a budget. So I think second year is definitely better regarding your finances.

**6.29 Interviewer:** And because your parents didn't go to university, do you feel like it would have made it easier for you to adjust if they went...

**6.30 Participant:** I don't think so because I feel like it's your own experience, I feel like when you get here, they can't prepare you for university because, I feel like when you get here, you need to get your own perspective, to get here you need to see, "Oh this is what I like, this is what I don't like". I feel like, ja, I don't think they can prepare you because it's your life. You need to come here, you need to experience it for yourself, so ja.

**6.31 Interviewer:** So you feel like them not going to university has no effect at all on how you're doing...

**6.32 Participant:** No, I don't think so because they both are successful businesses people, so it actually shows me that if you don't go to university there is a way to live, like they are successful business people so I feel like I've got the opportunity to come and I'm grateful because they didn't have the opportunity to come, so it actually makes me appreciate it a bit more and like think, and study more because this is my chance to get a degree, because my parents didn't have it, so it is actually more motivation.

**6.33 Interviewer:** And uhm...do you think you would have adjusted better if you were male, or do you think males have it easier with adjusting...

**6.34 Participant:** I don't know why but I think males have, I think they adjust better, because I don't know why, I think it is like women have more hygiene, something like that, and women are more picky. And men seems like they just go with a flow, I don't know why (laughs)...and men usually don't mind to be away from home, where girls are like, "Agh I miss my mom and agh I miss my dad". But I think ja, it's a bit easier for them to adjust.

**6.35 Interviewer:** And overall your first year, just sum it up the experience for you, comparing it to this year, how was the experience?

**6.36 Participant:** The experience of last year actually helped me this year, because I mean I feel like especially if you didn't come to res your first year, you wouldn't have gotten all the experience of campus. But like my first year experience was, it was challenging, but it was fun, because I went on a lot of land service camps, you meet new people on every camp, so this was fun for me. Because you get there and you know no one, and I just make, like a lot of new friends. So making new friends last year, coming back in this year you feel home, where last year you're still adjusting and feel like "oh this is my home".

**6.37 Interviewer:** Was it difficult to adjust to a new environment?

**6.38 Participant:** No, because I went on a lot of camps, netball camps, land service camps, so adjusting to somewhere new is not difficult...

**6.39 Interviewer:** So that helped...

**6.40 Participant:** Ja, that helped me a lot

**6.41 Interviewer:** Oh that's good. And what coping mechanisms did you use last year to just deal with the challenges that it had...

**6.42 Participant:** My faith, a lot, my faith helped me a lot. Last year I also didn't know...the first six months I didn't go to church, well I went to Koviesie church, but I couldn't find my church, and then I found CRC so like every week I go to church now, so that helps a lot, my faith helps my coping a lot because I turn to God if something is challenging and the friends as well, the new friends I made in res also, because they're going through the same things you are, they're going through the same difficulties and challenges as you, so I feel like talking to them also helped me a lot.

**6.43 Interviewer:** Okay, thank you \*...

**6.44 Participant:** Is that everything?

**6.45 Interviewer:** Yes.