The role of socio-demographics, personality characteristics, social support, and well-being in student's intention to drop out

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the degree Magister Commercii in Industrial Psychology at the
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COMMENTS

The reader is reminded of the following:

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- The mini-dissertation is submitted in the form of a research article. The editorial style specified by the South African Journal of Industrial Psychology (which agrees largely with the APA style) is used, but the APA guidelines were followed in referencing and constructing tables.

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4 May2012

To whom it may concern,

This letter serves to confirm that the mini-dissertation entitled The role of socio-demographics, personality characteristics, social support and well-being in student's intention to drop out by Ms Kelly Pereira Cortes (student number 20568398) has been language edited by CTrans. This means that the mini-dissertation has been edited for spelling, grammar and syntax. The above-mentioned document has been edited by a professional editor. However, the onus rests on Ms Cortes to work through the editorial changes proposed by CTrans, and to either accept or reject them.

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ABSTRACT

Title: The role of socio-demographics, personality characteristics, social support, and well-being in students' intention to drop out.

Key terms: University students, intention to drop out, socio-demographic characteristics, personality characteristics, career decision-making difficulties, social support, student burnout, student engagement

Student intention to drop out is a concern for higher education institutions as well for their students. Students with the intention to drop out may eventually drop out and contribute towards the already high dropout rates, which are causing economic damage. Students leaving their institution have vast financial consequences for their institution, as institutions obtain grants from the government according to their success rates. Although previous research has been conducted on students' intention to drop out, it is limited, especially when looking at possible predictors that are specific to the South African context. This study contributes towards the gap in research regarding the possible predictors of student intention to drop out.

The objectives of this study were to 1) conceptualise the possible predictors of student intention to drop out according to the literature; 2) determine if self-evaluation traits (self-esteem and self-efficacy) are significant predictors of student intention to drop out; 3) determine if student burnout and student engagement are significant predictors of student intention to drop out; 4) determine if social support (social support from parents and general social support) are significant predictors of student intention to drop out; and 5) determine if career decision-making difficulties are significant predictors of student intention to drop out.

A non-probability quota sample ($N = 782$) was used to investigate possible predictors of career student intention to drop out in a sample of university students. Student intention to drop out was measured by one item consisting of two categories: I have no intention to drop out ($n = 501$), and

I have an intention to drop out ($n = 280$). These two groups were enclosed as a dependent variable in the logistic regression.

The variables included in the final model predicted between 13% (Cox and Snell) and 18% (Nagelkerke) of the variance in intention to drop out. The results of this study suggest that self-esteem had an influence on student intention to drop out. Furthermore, it was found that cynicism and dedication have a significant relationship with student intention to drop out. Lastly, lack of information about ways to obtain information also indicated a significant relationship with student intention to drop out. Thus, it may be concluded that self-esteem, burnout and engagement and lack of information about ways of obtaining information have an influence on students' intention to drop out.

Recommendations were made for practice as well as for future research.

OPSOMMING

Titel: Die rol van sosio-demografiese karaktertrekke, persoonlikheidseienskappe, sosiale ondersteuning en welstand in die student se intensie om studies te staak.

Sleutelterme: Universiteit studente, intensie om studies te staak, sosio-demografiese karaktertrekke, persoonlikheidseienskappe, loopbaan besluitnemingsprobleme, sosiale ondersteuning, student uitbranding, studente betrokkenheid.

Studente wat beplan om hulle studies te staak is 'n groot bron van kommer vir hoër onderwysinstellings, asook vir die betrokke studente. Sodanige studente met kan hulle studies totaal beëindig en dit dra by tot diedeurvloeisyfer wat reeds baie swak is wat groot ekonomiese skade tot gevolg kan hê. Studente wat hulle opleidingsinstelling voor die voltooiing van hulle studies verlaat hou groot finansiële gevolge vir die instelling in, omdat hierdie instellings subsidies van die regering ontvang op grond van hulle sukseskoerse. Hoewel vorige navorsing toon dat min studies al gedoen is ten opsigte van studente wat hulle studies wil staak, veral op moontlike voorspellers van studente met die intensie om hulle studies te staak, spesifiek in die Suid-Afrikaanse konteks. Hierdie studie dra by tot die leemte in die navorsing oor die moontlike voorspellers van studente se intensie om hulle studies te staak.

Die doelwitte van hierdie studie was om 1) die moontlike voorspellers van die studente met die intensie om hulle studies te staak volgens die literatuur te konseptualiseer; 2) te bepaal of self-evalueringseienskappe (selfbeeld en self-doeltreffendheid) 'n beduidende voorspeller is van die studente wat die intensie het om hulle studies te staak; 3) te bepaal of studente uitbranding en studentebetrokkenheid 'n voorspeller is van die hulle intensie om hulle studies te staak; 4) te bepaal of sosiale ondersteuning (sosiale ondersteuning van ouers en algemene sosiale ondersteuning) 'n beduidende voorspeller is van die studente se intensie om hulle studies te staak; en 5) te bepaal of loopbaanbesluitnemingsprobleme 'n beduidende voorspeller van studente se intensie is om hulle studies te staak.

'n Nie-waarskynlikheid kwotasteekproef ($n = 782$) is gebruik om die voorspellers van studente met die intensie om hulle studies te staakin 'n groep van universiteitstudente te ondersoek. Studente se intensie om hulle studies te staak is gemeet deur een item, bestaande uit twee kategorieë, naamlik 1) ek het geen voorneme om my studies te staak nie ($n = 501$) en 2) ek het 'n voorneme om my studies te staak (n= 280). Hierdie twee groepe is ingesluit as 'n afhanklike veranderlike in die logistiese regressie.

Die resultate van hierdie studie bevind dat selfbeeld 'n invloed het op studente se intensie om hulle studies te staak. Verder is dit bevind dat die sinisme en toewyding in 'n betekenisvolle verhouding met mekaar staan teenoor studente se intensie om hulle studies te staak. Laastens het die gebrek aan inligting oor die tegnieke om inligting te bekom ook 'n betekenisvolle verhouding met die intensie van studente wat hulle studies wil staak. Die afgeleiding kan dus gemaak word dat selfbeeld, uitbranding, betrokkenheid en die gebrek aan tegnieke om inligting te bekom 'n invloed het op die studente se voorneme om hulle studies te staak. Meer spesifiek toon hierdie studie dat die finansiële invloed, beroep wat oorweeg word en die mate waartoe 'n student seker is van die loopbaan wat hy/sy wil volg, studente se intensie om hulle studies te staak kan beïnvloed. Dit word ook deur vorige navorsing ondersteun.

Aanbevelings is voorts ook gemaak vir die praktyk sowel as vir toekomstige navorsing.

CHAPTER 1

INTRODUCTION

This mini-dissertation focuses on the role of core self-evaluation traits, student well-being, social support and career decision-making difficulties of students and their intention to drop out. The objective is to compare students with no intention to drop out versus those with the intention to drop out and to investigate whether core self-evaluation traits (self-esteem and self-efficacy), burnout, engagement, social support and career decision-making difficulties predict student intention to drop out.

This chapter gives the problem statement and discusses the research objectives and the research methodology. It concludes with a chapter summary and overview of the chapters.

1.1 PROBLEM STATEMENT

There are extensive gaps in terms of the income individuals obtain in our current society; the major reason for this is linked with individual's education levels. A high-school certificate is now no longer viewed as being adequate to secure a sustainable living (Zeidenberg, 2008). Studies have revealed greater differences in income for those who have obtained a higher education qualification versus those that have not. Therefore, it could be concluded that obtaining a higher education qualification will aid personal and societal upliftment (Zeidenberg, 2008).

In a higher education environment, students work with the intent of achieving a degree, where they attend classes, do assignments in order to pass exams and endeavour to meet deadlines (Robotham, 2008; Schaufeli, Martínez, Pinto, Salanova & Bakker, 2002). According to Barefoot (2004), regardless of the value of having a higher education qualification, future student dropout rates are a concern and cause of inefficiency for many countries, including South Africa. Student dropout rates signifies a major dilemma that has caught the attention of many

international authoritative bodies for more than 30 years. Brainard and Fuller (2010) conducted an analysis whereby one third of 1,400 United States Universities had displayed a decrease in graduation rates over a six year period between 2003 and 2008. Bowling Green State University experienced a 7% decrease in their number of graduates; the North Dakota State University experienced a decrease of 6%, and Wilmington University experienced a higher percentage of 8% lost graduates (Brainard & Fuller, 2010). Walsh, Larsen and Parry (2009) indicated that only 78.1% of 256,000 new full time students that enrolled in Britain would complete their higher education qualification. Hence, it can be deduced from the studies mentioned above that one in every four students are failing to complete their higher education qualification. In another study conducted by Lassibille and Gomez (2008) on Spanish students, the results indicated that approximately 70% of first year students drop out of higher education. Therefore, this amounts to only one third of all spanish enrolled students completing their higher education qualification.

It is crucial that student dropout rates be addressed in South Africa. The Council on Higher Education (2000) reports that student dropout in South Africa is costing the taxpayer R1.3 billion per annum. The Department of Education (2010) states that the South African higher education system consists of 23 public higher education institutions of which 11 are universities, six are comprehensive universities, and a further six, universities of technology. Research states that there are also 87 other private higher education institutions. According to Human Sciences Research Council (2008), it was reported that in the year 2000,there was 120 000 students who enrolled for a generic bachelors degree , 36 000 (30%) dropped out in their first year of studies. Furthermore it was reported that 24 000 (20%) dropped out during their second and third year of study. Thus only 60 000, 22% students graduated within the specified three years duration for a generic Bachelors degree. The above statistics indicate that there was an estimated 20% drop out rate of students in the higher education system (DoE, 2010).

Higher education attainment has a vital contribution towards the economy of a country. It leads to a decrease in long term poverty, higher personal per capita income, higher state tax base and a stronger economy (McMahon, 2000). The individual costs associated with student dropout include harm to the students' esteem and self-image (Koen, 2007). Barefoot (2004) noted that there are detrimental effects for higher education institutes when students dropout. In most cases,

graduation rates are linked to government funding, as a result of poor graduation rates higher education institutions will receive less financial funding, which would have adverse financial implications for the institutions. Furthermore, students dropping out of a higher education institution would reflect a poor reputation of the institution, which could lead to negative financial implications for the institution (Barefoot, 2004).

In reading the above statements reporting on the consequences of student dropout, it is clear that it is of paramount importance that possible reasons for students' intention to drop out be studied (Fike & Fike, 2008). As a result, significant contributions as well as interventions could be developed to assist students with the problem at hand, as well as the economy and higher education institutions. This could be advantageous for university students, society and academic institutions at large (Fike & Fike, 2008).

The term 'intention to leave' may be defined as the emphasis on the decision-making process of an individual from the initial thinking about leaving to the actual behaviour of leaving (Bobko, 2001). There has been indecision on how to define student dropout. It can be said in one definition that a student may terminate a course of study that he or she has begun without completing a degree. Whereas in other instances a student may change his or her subject or even leave the university where she or he had registered for her or his studies. Lastly they may interrupt their studies for various reasons and carry on later in life (Georg, 2009). For the purposes of this study, the focus fell on those students' that terminated their studies without completing their degree..

According to Levitz and Noel (1989), there are many reasons why students have the intention to dropout from a higher education institution. Although some of the reasons are beyond the control of the institution, some are avertable. Variables such as the level of education a student's parent holds and high school GPA (the average grade earned by a student, figured by dividing the grade points earned by the number of credits attempted), has an effect on the student's intention to dropout (Ting & Robinson, 1998). According to Human Sciences Research Council (2007), one of the foremost reasons why students do not complete their higher education qualification is due to the socio-economic status of the students' families. Furthermore, it was stated that students

may dropout due to one or more of the following reasons: personal, social, economic, cultural, political and others (Human Sciences Research Council, 2007). A study conducted by Johnes and McNabb (2004) established that students would most likely dropout willingly if they were to stem from a lower socioeconomic background. In another study carried out by Smith and Naylor (2001), it was stated that those students stemming from lower-social class backgrounds and those living in areas with high unemployment rates were most likely to drop out from a higher education institution. It was found that emotional rather than academic factors were the cause of first year students wanting to dropout (Szulecka, Springett & de Pauw, 1987).

Previous research has revealed that in the last thirty years, there has been a dramatic increase in the levels of stress experienced by students (Sax, 1997). Therefore, it may be said that students feeling anxious and stressed would more likely consider dropping out than those students who did not feel anxious and stressed. Tross, Harper, Osher and Kneidinger (2000) maintain that personality variables may be good predictors when it comes to students not dropping out of institutions. Interpersonal relationships with fellow peers are an important aspect of student success (Upcraft & Gardner, 1989). Furthermore, Tinto (1987) stated that being in conflict with one's peers could result in voluntary departure from a higher education institution. The level of which a student is involved with campus organisations may also have an effect on their decision to leave (Okun & Finch, 1998). For the purposes of this study, students' intention to drop out of higher education institutions will be studied with the following predictors: core self-evaluation traits (self-esteem and self-efficacy), burnout, engagement, social support, and career decision-making.

Core self-evaluation traits were investigated for the purposes of this study, including self-esteem and self-efficacy. Research has reported that self-esteem plays a role in academic achievement (Redenbach, 1991). Self-esteem may be defined as the evaluation that one's self is seen either in a positive or negative manner. There has been a positive correlation between how people value themselves and the level of their academic attainments. Research reveals that those students with confidence tend to achieve more whilst those that lack confidence achieve less (Lawrence, 2000). Students that feel that they are inadequate, for example, when not being able to read, write or spell, unlike most others, are most likely to have low self-esteem (Lawrence, 2000).

According to Dodgson and Wood (1998), individuals with high self-esteem will focus on their strengths and overpower any negative thoughts when encountering difficulties. Furthermore, an individual with low self-esteem may be more inclined than those with higher self-esteem levels to withdraw from higher education institution when faced with poor grades.

Self-efficacy could be characterised as an individual's belief in their ability to sufficiently complete tasks that will result in achievement (Bandura, 1986). Therefore, those students who do not believe or see themselves achieving their career goal, in actual fact, would be wasting their time as well as their tuition money and dropout (Noel, 1985). Self-efficacy may be further defined as an individual's judgments of their capabilities to organise and execute courses of action required to attain designated types of performances (Bandura, 1986). Self-efficacy beliefs affect which action a person will choose, the amount of effort that will exerted, endurance levels when facing obstacles, thought patterns, stress levels, and levels of accomplishment (Bandura, 1977). Self-efficacy beliefs have been found to be sensitive to subtle changes in students' performance (Pintrich, 1999). According to Laschinger (1996), students with higher self-efficacy beliefs will exert greater effort in order to overcome obstacles and difficulties that they may encounter and therefore persist longer than those students who have doubts in their capabilities. Harvey and McMurray (1994) have said that those students with lower academic self-efficacy were most likely to dropout compared to those with higher academic self-efficacy. According to Pintrich and Garcia (1991), students with higher self-efficacy beliefs, believe that they are capable of executing academic tasks as they use more cognitive and metacognitive strategies and are more likely to persist longer than those who have lower self-efficacy beliefs. Therefore, from this statement it may be concluded that those students who hold higher self-efficacy beliefs are most likely to persist at gaining their higher education degree than those who hold lower self-efficacy beliefs.

Social support from parents may be defined as the provision that parents give to their children in the form of skills, training, advice, and guidance (Desforges & Abouchaar, 2003). General social support may be seen as social support from the broader family, peer groups, neighbourhood influences, institutions, and other bodies such as a church (Desforges & Abouchaar, 2003). Individuals acquire social support from peers, friends, and family members; in most cases

individuals will attribute to family, peers, and teachers as being the most important sources of social support (Coşkun, 2009). Amongst young adolescents, parents provide social support with regards to personality qualities and important decision making (Wall, Covell & Macintyre, 1999). Teachers are more likely to provide social support regarding academic attitude, and academic success (Gurkan, 1993). Peers are considered as providing social support in the realm of societal development, where there is a mutual sharing of personal, social, or moral ideas (Turner, 1999). Previous research on social support state that an individual's academic success (Yıldırım & Ergene, 2003), and decision making abilities (Gucray, 1998) are positively affected by an increased social support system. Hence, it is evident that a student may receive social support from a parent and general social support from other parties, for example, social support from peers and teachers.

Social support can be viewed as a broad construct used across various fields of study. In a study conducted by Goldsmith (2004), social support was linked positively with health, personal relationships, social adjustment, improved morale, and student achievement. Furthermore, according to Tinto (2002), students who are provided with academic, social and personal support are more likely to persist and graduate from higher education institutions. A number of researchers have investigated the positive role of social support on students. The studies explored the role of social support regarding student health (Hale, Hannum & Espelage, 2005), the transition into a higher education institution from high school (Lafrenier & Ledgerwood, 1997), and academic achievement (De Berard, Spielmans & Julka, 2004). The research avers that social support from others has a positive impact on students and may contribute to better adjustment to the higher education setting and furthermore combat the student's intention to drop out (Nora, 2001). Social support from significant others eased the transition into a higher education institution, helped students adjust, influenced their academic and social experiences, affected the students level of goal commitment, and lastly had a positive influence on the students' intention to remain in the institution (Nora, 2001). A study conducted by Nora (2001) indicated that social support is a superior predictor when measuring student intention to drop out.

According to Bernard-Phera (2000), a career choice is one of the most difficult choices that a young adult will need to make in their lives. It is a process that entails a range of cognitive and

behavioural actions that is essential in obtaining information about themselves and the environment. A productive career could provide one with economic means (Crites, 1981). The career decision making process is characterised by the same decision making process as any other, which is compromised by (i) an individual being present in the process, (ii) the individual chosing what they feel is most suitable from all the possible career choices, (iii) the individual comparing and evaluating the different alternatives, based on the influence of the characteristics of the educational programme and profession of the individual (Gati, Krausz & Osipow, 1996). In making a successful and wise decision regarding a career individuals should possess a clear understanding of themselves, their aptitudes, abilities, interests, ambitions, resources, limitations, and their causes (Parson, 1909). Students who are undecided and lack a career goal are more likely to exhibit low self-esteem as well as inadequate educational self-efficacy (Hull-Blanks et al., 2005).

Gati et al. (1996) developed a taxonomy to better understand the various difficulties encountered with career indecision. In the taxonomy, a distinction was made between career decision making difficulties encountered at the beginning of the career decision making process and those difficulties encountered during the said process. Furthermore, the latter factor was divided into three categories: lack of readiness, lack of information, and inconsistent information (Gati et al., 1996). Much research has been conducted on the career decision making process (Gati & Asher, 2001; Sauermann, 2005); however, there is a major scarcity of research relating to dropping out due to career decision making difficulties (Elisha, Icekson & Yelinek, 2007). This scarcity of research is disappointing because this information could enlighten individuals with regards to the academic, developmental, cognitive and social issues, pertaining to decision-making (Elisha et al., 2007).

The Career Decision Making Difficulty Questionnaire (Gati & Saka, 2001) was used for the purposes of this study and was based on the above mentioned taxonomy (Gati et al., 1996). Gati et al. (1996) further acknowledged three categories that contributed towards the lack of readiness. Firstly, the lack of motivation from the individual to commence with career decision-making, this is characterised by a lack of willingness to take part in the decision-making process. The second category is the general indecisiveness that permeates all types of decision-making for

the individual. The last category looked at is the various beliefs in dysfunctional career decision-making myths (Gati et al., 1996).

The lack of information and inconsistent information sub-factor comprised four categories. The lack of information about the career decision making process is characterised by the individual having little or no knowledge on how to make sound decisions about their career. The lack of information about the self is characterised by the individual not knowing their own preferences, abilities and potential. The lack of information about occupations may be defined as the lack of information on career selections. The lack of information about ways of gaining career information is characterised as lacking the knowledge in obtaining other and additional information that may aid the career decision making process (Gati et al., 1996).

The inconsistent information sub factor was divided into three categories: inconsistent information due to unreliable information, which may be defined as experiencing difficulties that is related to unreliable or fuzzy information; inconsistent information due to internal conflicts that may be characterised by experiencing difficulties related to the developing of a personal identity of the individual; and, inconsistent information due to external conflicts involving significant others (Gati et al., 1996).

According to Schaufeli et al. (2002), burnout amongst students refers to feeling exhausted as a result of study demands, students feel incompetent, and have cynical and detached outlook towards their studies. The concept of exhaustion is characterised by feeling worn out, loss of energy, depletion, debilitation, and fatigue (Maslach, Jackson & Leiter, 1996). Cynicism may be defined as the indifference or distant attitude towards work in general, not necessarily with other people (Schaufeli et al., 2002).

As a result of burnout, students may experience the following: physically exhaustion, insomnia, and an increase in drug or alcohol abuse (Jacobs & Dodd, 2003). Previous research conducted on burnout suggests that there are various indicators that suggest that a student is suffering from burnout. These indicators may vary but include the following: anger, disobedience, and sadness (Minster, 2001). When these indicators and other contributing factors build up to burnout, it is

likely that it will have adverse effects on student performance (Uludağ & Yaratan 2010). Research conducted by Schaufeli et al. (2002) indicates that burnout has adverse effects on students' lives and performance, as they found that burnout is negatively correlated with success in students. Hence, it may be assumed that burnout has adverse effects on students' lives and performance (Uludağ & Yaratan 2010). According to Welch, Mederios and Tate (1982), burnout has adverse effects on students and is characterised by failure to remember classes, assignments and deadlines, loss of meaning in their endeavours, shutting off from opportunities provided by the institution, and lastly dropping out. According to Ramist (1981), students feeling burnt out can lead to higher absenteeism, lower motivation to do prescribed course work, higher percentage dropout at college and so on. Previous research reveals that there is little doubt that burnout foresees dropout intention (Koeske & Koes, 1989; Lingard, 2003). However, not all students with the intention to dropout will take such action.

An emerging trend of positive psychology that focuses on an individual's strengths rather than their weaknesses (Seligman & Csikszentmihalyi, 2000) has contributed towards research in the opposite notion of burnout: engagement. Engagement is defined as "a positive, fulfilling, work-related state of mind that is characterized by vigour and dedication" (Schaufeli, Salanova, González-Romá & Bakker, 2002, p. 72). Vigour is defined by high levels of energy and mental resilience while working and having the willingness and ability to invest effort in one's work (Schaufeli et al., 2002). Dedication is defined by a sense of significance, enthusiasm, inspiration, pride, and challenge (Schaufeli et al., 2002). Engagement is viewed as an antipode of the burnout, and has been researched with regards to students (Schaufeli et al., 2002). Research conducted by Schaufeli et al. (2002) states that students who find themselves engaged in their studies will have increased levels of performance. Furthermore, it was stated that vigorous and dedicated students who were energetic and absorbed in their studies are successful. Hence, based on previous research, it may be assumed that students who are engaged in their studies will most likely demonstrate higher motivation, capability, and efficacy (Uludağ & Yaratan, 2010). It has been said that low levels of engagement are more likely to prevail amongst those students living in poverty, adolescents with disabilities and minority groups (Canadian Education Association, 2009). Disengagement experienced by students living in poverty may lead to dropping out (National Research Council, 2004).

The following research questions emerge from the problem statement:

- What are the antecedents of intention to drop out according to the literature?
- Are core self-evaluation traits (self-esteem and self-efficacy) significant predictors of intention to drop out?
- Are student burnout and student engagement significant predictors of intention to drop out?
- Are social support (social support from parents and general social support) significant predictors of intention to drop out?
- Are career decision-making difficulties significant predictors of intention to drop out?
- What recommendations can be made for future research?

1.2 RESEARCH OBJECTIVES

The research objectives are divided into a general objective and several specific objectives.

1.2.1 General objective

The general objective of this study is to investigate the predictors of student's intention to drop out by comparing those that have the intention to drop out versus those who do not intend to drop out.

1.2.2 Specific objectives

The specific objectives of this research are to:
- Conceptualise the students' self-reported intention to drop out of university according to literature.
- Determine whether core self-evaluation traits (self-esteem and self-efficacy) are significant predictors of intention to drop out.
- Determine whether student burnout and student engagement are significant predictors of intention to drop out.

- Determine whether social support (social support from parents and general social support) are significant predictors of intention to drop out.
- Determine whether career decision-making difficulties are significant predictors of intention to drop out.
- Make recommendations for future research.

1.3 RESEARCH METHOD

The research method consisted of a literature review and an empirical study. The results were presented in the form of a research article.

1.3.1 Literature review

The literature review focused on student dropout and student's intention to drop out of university. Sources which were consulted included books, journals, Google Scholar, Emerald, SAePublications, ProQuest, ScienceDirect, Sabinet Online, JSTOR, NEXUS and EBSCO Host Research database (PsycINFO database, Academic Search Premier & Business Source Premier).

1.3.2 Research participants

A non-probability quota sample of students at a higher education institution was employed. Students in their first to sixth year received e-mails pertaining to the study. Because student and personnel numbers also serve as email addresses, it was not possible to distinguish between students and personnel. Therefore, the e-mail was sent out to students and personnel, with a comment at the beginning of the email that only students should participate in the study. As a result, the response rate could not be calculated. A realised sample size of 782 was obtained.

1.3.3 Measuring instruments

Biographical questionnaire. This questionnaire was used to collect information regarding the participant's socio-demographic characteristics and enclosed questions with regards to gender,

age, and year of study as well as faculty. Supplementary questions were further incorporated in order to obtain external predictors. Questions pertaining to career guidance (e.g., "Did you receive career guidance / career counselling before you decided on a coarse of study?"), work experience (e.g., "Before you chose your degree / possible career, did you work in that environment or with someone already in the career that you considered?"), guidance from parents or others in making a career decision (e.g, "Did your parent(s) or guardian(s) help you choose a course of study and possible career?"), and (e.g., "Did other people help you choose a course of study and possible career?"), were enclosed in the questionnaire.

Core self-evaluation traits. Two core self-evaluation traits were measured, namely self-esteem and self-efficacy. Self-esteem was measured with Rosenberg's (1965) Self-Esteem Scale. The scale provided a measurement on attitudes about one self and had five negatively worded items and five positively worded items. Participants were requested to indicate their responses on a scale of 1 (strongly disagree) to 5 (strongly agree) with statements such as ("I have a positive attitude towards myself"). The scale developed by Rosenberg is a widely used measure of self-esteem and has displayed good validity and reliability (Crandall, 1973; Rosenberg, 1965). The Cronbach alpha coefficient for self-esteem was 0,88 (Judge, Erez, Bono & Thoresen, 2003). Self-efficacy was measured using the Self-Efficacy Scale (Judge, Locke, Durham & Kluger, 1998). The scale consists of eight items (e.g., "I can handle the situations that life brings"), which was scored on a five-point likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). Judge et al. (2003) reported a Cronbach alpha coefficient of 0,89 for self-efficacy.

Career decision making difficulties. The Career Decision Making Difficulty Questionnaire (CDDQ) (Gati & Saka, 2001) was utilised to determine the difficulties that students experience in their decision making process. The questionnaire has 34 items and three clusters, namely, lack of readiness, lack of information and inconsistent information.

- *Lack if readiness* has three subscales, namely, lack of motivation (three items, e.g., "Work is not the most important thing in one's life and therefore the issue of choosing a career doesn't worry me much"), indecisiveness (four items, e.g., "It is usually difficult for me to make decisions"), and dysfunctional beliefs (three items, e.g., "I expect that through the career I

choose I will fulfil all my aspirations"). The Cronbach alpha coefficient for the lack of readiness scale was reported as 0,71 (Gati, Krausz & Osipow, 1996).

- *Lack of information* has four subscales, namely lack of information about the decision making process, (three items, e.g., "I believe that a career choice is a one-time choice and a life-long commitment"), lack of information about the self (eight items, e.g., "I find it difficult to make a career decision because I don't know how to combine the information I have about myself with the information I have about different careers"), lack of information about occupations (four items, e.g., "I find it difficult to make a career decision because I don't know what careers will look like in the future"), and lack of information about ways of obtaining information (two items, e.g. "I find it difficult to make a career decision because I do not know how to obtain accurate and updated information about existing occupations and training programmes, or about their characteristics"). The Cronbach alpha coefficient for the lack of information scale was reported at 0,91 (Gati et al., 1996).

- *Inconsistent information* has three subscales, namely, unreliable information (six items, e.g., "I find it difficult to make a career decision because I constantly change my career preferences"), internal conflicts (seven items, e.g., "I find it difficult to make a career decision because the occupation I am interested in involves a certain characteristic that bothers me"), and external conflicts (four items, e.g., "I find it difficult to make a career decision because there are contradictions between the recommendations made by different people who are important to me about the career that suits me or about what career characteristics should guide my decisions"). The Cronbach alpha coefficient for the inconsistent information scale was reported at 0,93 (Gati et al., 1996).

Items were scored on a nine-point Likert scale where respondents were requested to designate their level of agreement ranging from 1 ("Does not describe me") to 9 ("Describes me well") (Albion & Fogarty, 2002). The Conbach alpha for the total questionnaire was reported as 0,94 (Gati et al., 1996).

Social support. Two types of social support were measured by self-developed items. Social support from parents defined as the provision that parents give to their children in the form of skills, training, advice and guidance) and general support which is seen as social support from the broader family, peer groups, neighbourhood influences, institutions and other bodies, (Desforges & Abouchaar 2003). Three items were used to measure parent support (e.g. "I always receive help from my parents or guardians when difficulties in my studies arise"). Four items were used to measure general support (e.g. "I have someone to whom I can talk about difficulties and problems"). The items were scored on a five-point Likert scale where respondents were asked to label their level of agreement ranging from 1 ("Totally agree") to 5 ("Totally disagree").

*Student burnout.*The Maslach Burnout Inventory-Student Survey (MBI-SS) was used to measure burnout levels (Schaufeli et al., 2002), including exhaustion (five items, e.g. "Studying or attending a class is really a strain for me") and cynicism (five items, e.g. "I have become less interested in my studies since my enrolment at the university"). The items were scored on a seven-point frequency rating scale ranging from 0 (never) to 6 (everyday). In a study by Mostert, Pienaar, Gauché and Jackson (2007) Afrikaans and Setswana speaking participants were selected at two campuses from a local university. The Cronbach alpha coefficients reported in the study were 0,74 for exhaustion and 0,68 for cynicism. Mostert et al. (2007) also provided evidence for the construct validity and reliability on the MBI-SS for South African university students. In another study conducted by Pienaar and Sieberhagen (2005) a sample of student leaders from the students Representative Council and members of the House Committees from a local university were studied. Pienaar and Sieberhagen (2005) reported Cronbach alpha coefficients of 0,79 for exhaustion and 0,73 for cynicism.

Student engagement. The Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002) was used for the purpose of this study to measure engagement, including vigour (six items, e.g. "I can continue for a very long time when I am studying") and dedication (five items, e.g. "My studies inspire me"). The UWES was scored on a seven-point frequency rating scale, ranging from 0 (never) to 6 (always). Pienaar and Sieberhagen (2005) found acceptable reliability coefficients for vigour ($\alpha = 0,77$) and dedication ($\alpha = 0,85$).

Intention to drop out. One item was used to measure this construct (e.g. "How often do you think about leaving the university before you finish your degree?"). Three options were given to answer the above mentioned question: 1) I never think about it; 2), I sometimes think about it; and 3) I always think about it. Categories two and three were grouped together with participants who are thinking about dropping out before they complete their studies.

1.3.4 Research procedure

Once permission had been granted from the institution to do the study, a letter requesting participant's involvement was e-mailed with a link that directed them to a protected site. The purpose of the study as well as the importance thereof was disclosed. Prior to commencing with the questionnaire a consent form was provided to complete. It was clearly stated that participation of the study was voluntary, and the confidentiality of participants was emphasised. Participants had the freedom of completing the questionnaire on their own time, as the progress on the questionnaire could be saved, if the participant wished to log off and carry on at a later stage.

1.3.5 Statistical analysis

The statistical analysis was carried out by means of the SPSS program (SPSS, 2009). The data was analysed by making use of descriptive statistics (e.g. means and standard deviations). In determining the internal consistency of the variables, Cronbach alpha coefficients were utilised (Clark & Watson, 1995). A Cronbach alpha coefficient encompasses vital information regarding the proportion of variance of the items of a scale in terms of the total variance explained by the particular scale. The measured items were regarded reliable if the coefficient was 0,70 or higher (Nunnally & Bernstein, 1994). Pearson product-moment correlation coefficients were used to specify the relationships between the constructs in order for a more accurate approximation of the direction and degree of the relationship to be attained. Effect sizes were used to determine the practical significance of the results (Steyn & Swanepoel, 2008). A cut-off point of 0,30 (medium effect) and 0,50 (large effect) was set for the practical significance of the correlation coefficients

(Cohen, 1988). The confidence interval level for statistical significance was set at a value of 95% ($p \leq 0{,}05$).

Logistic regression was used to evaluate the probability of a certain occurrence; this was then based on the combination of values of the predictor variables (Tabachnick & Fidell, 2001). It was used for describing and testing hypotheses about relationships between a categorical outcome variable and one or more categorical or continuous predictor variables (Peng, Lee & Ingersoll 2002). It is vital to determine whether there is a relationship between student's intention to drop out and the set of antecedents in the study. In order to simplify the model, it is necessary to find a relationship whilst still upholding strong prediction. An equation was therefore utilised to predict new cases on a probabilistic basis. Students category of 'no intention to drop out' or 'intention to drop out' was compared against certain socio-demographic characteristics, core self-evaluation traits , career decision-making difficulties, social support, student burnout and student engagement using χ^2 tests and analysis of variance (ANOVA). The variables that differed significantly ($p \leq 0{,}01$) were included in the logistic regression analysis.

Direct logistic regression was used, as the study was trying to measure the relationship between categories, data was entered into the analysis as 0 or 1 coding for the dichotomous outcomes (Peng et al., 2002). Furthermore direct logistic regression was utilised to forecast whether students belong to the following category; 'no intention to drop out' (coded 0) or 'intention to drop out' (coded 1).

In order to test the fit of the logistic regression, the following statistics were evaluated: 1) overall model evaluation; 2) goodness-of-fit statistics; and 3) statistical tests of individual predictors (Peng et al., 2002).

Overall model evaluation. An improvement over the baseline was examined by using the likelihood ratio (Peng et al., 2002). According to Tabachnick and Fidell (2001), the log-likelihood is the summation of the probabilities with the predicted and real outcomes.

Goodness-of-fit statistics. To assess the fit of a logistic model against actual outcomes the goodness-of-fit statistics were utilised. The inferential goodness-of-fit test was the Hosmer–Lemeshow (H–L) (Peng et al., 2002). There were two additional descriptive measures of goodness-of-fit that were defined by Cox and Snell (1989) and Nagelkerke (1991). These indexes were a distinction of the R^2 concept defined for the ordinary least squares regression model. R^2 may be defined as the proportion of the variation in the dependent variable that may be explained by predictors in the model (Peng et al., 2002).

Statistical tests of individual predictors. By using the Wald chi-square statistic and the likelihood-ratio test, the statistical significance of individual regression coefficients (i.e. βs) was tested (Peng et al., 2002). Each group in the model were calculated by odds ratios (e^{β}) and 95% confidence intervals (CIs). A value greater than 1,00 would specify that as the predictor increased, the odds of the outcome increased, whilst a value less than 1,00 would specify that as the predictor increased, the odds of the outcome occurring decreased (Agresti , 1996).

1.3.6 Ethical considerations

For the success of this study it is vital to conduct research that is fair and ethical. Consent forms were attached to the questionnaire where the purpose of this research study was explicated. It was also be stated that the study is voluntary and if the participant wishes to withdraw, he or she may do so at any given time. Furthermore information of all participants was kept confidential. The ethics committee of the institution reviewed the process explained above before the study may commence.

1.4 OVERVIEW OF CHAPTERS

This dissertation consists of three chapters. Chapter 1 is the introductory chapter, Chapter 2 is presented as a research article that discusses the research objectives and results, and Chapter 3 discusses the research conclusions, limitations, and recommendations.

1.5 CHAPTER SUMMARY

This chapter discussed the problem statement and research objectives. The measuring instruments and the research method were explained and an overview of the chapters was given. This chapter also included an overview of the chapters that follow.

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CHAPTER 2

RESEARCH ARTICLE

THE ROLE OF SOCIO-DEMOGRAPHICS, PERSONALITY CHARACTERISTICS, SOCIAL SUPPORT AND WELL-BEING IN STUDENTS' INTENTION TO DROP OUT

ABSTRACT

Orientation: Student intention to drop out is a big problem for higher education institutions as well as for their students. Students with the intention to drop out could lead to actual drop out causing great economic damage.

Research purpose: To determine the possible predictors of student intention to drop out by comparing students with no intention to drop out with those who have the intention to drop out.

Motivation for the study: To obtain a greater perception of the possible predictors of student intention to drop out in a South African university.

Research design, approach and method: A cross-sectional design was used. A non-probability quote sample ($N = 782$) was used to explore the possible predictors of student intention to drop out in a sample of university students. The participants were grouped as students with no intention to drop out and students with the intention to drop out. A total of 501 students had no intention to drop out while 280 had an intention to drop out. These two groups were enclosed as the dependent variable in the logistic regression analysis.

Main findings: The variables included in the final model predicted between 13% (Cox and Snell) and 18% (Nagelkerke) of the variance in intention to drop out. In the final step of the logistic regression, significant predictors of the intention to drop out were self-esteem, cynicism, dedication and lack of information on ways of obtaining information ($p \leq 0,05$).

Practical/managerial implications: Additional knowledge about possible predictors of the intention to drop out could assist universities in identifying possible risk students, who are prone to leave an institution, and thus to prevent dropouts.

Contribution/value-add: The study contributes to the current research on possible predictors of the intention to drop out which is limited in the South African context.

Keywords: University students, intention to drop out, core self-evaluation traits, career decision making difficulties, social support, student burnout, student engagement

INTRODUCTION

It is imperative that student dropout rates be addressed as student dropouts are costing the taxpayer approximately R1.3 billion per annum (The Council on Higher Education, 2000). It was reported by Breier and Mabizela (2007) that merely 15% of students who enrol complete their studies in the minimum amount of time. Furthermore, 30% drop out after their first year and 20% after their second year of study. On the other hand, those students who obtain a higher education degree contribute greatly towards the country's economy. The benefits of attaining a higher education include, amongst others, a decrease in long term poverty, higher personal per capita income, higher state tax base and a stronger economy (McMahon, 2000).

It seems that high dropout rates are a problem for international as well as South African higher education institutions. According to Cravatta (1997), about 80% of American students graduate from high school. Of this percentage, 45% will enrol in a higher education institution. Furthermore, of this percentage of enrolments, approximately 34% will drop out. In a previous study conducted by Brainard and Fuller (2010), it was reported that one third of 1,400 United States universities experienced a decline in their graduation rates from 2003 to 2008. In South Africa, the Department of Education (2010) reported that there was an enrolment rate of 837 779 students in 2009. Of these, 709 032 were undergraduate students and 128 747 were postgraduate students. A very small number of students graduated or received diplomas (only 144 852). Moreover, merely 9 492 (6.6%) were Masters and Doctorate graduates. It could therefore be estimated that there was a 20% dropout rate for students in the higher education system.

There are many negative effects on higher education institutions when students drop out, as government funding goes hand in hand with graduation rates. As students drop out, institutions will be given less funding from government. Institutions that have high dropout rates will be seen by society as poor academic institutions and their reputation will suffer, which in turn will have adverse financial implications for them (Barefoot, 2004). Students who drop out are also most likely to develop a low self-esteem and self-image (Koen, 2007). It is therefore important to investigate possible predictors of the intention to drop out, in order to prevent students from actually dropping out of higher education institutions.

According to the Council on Higher Education (2010), various student-related factors have been reported as contributing factors to not graduating. These include, amongst others, not being sufficiently prepared, academic ability, prior learning and language skills, students' approach to learning, students' attitudes and expectations, students taking less responsibility for their learning as well as personal matters pertaining to students' lives such as pressures with social, financial or family matters. According to Kemerer, Baldridge and Green (1982), institutions who have a large number of commuter students have higher dropout rates in comparison to those institutions where most students are in dormitory programmes. Smith and Naylor (2001) reported that students living in areas with high unemployment rates and those coming from lower socioeconomic backgrounds are more prone to drop out in contrast to those living in areas of higher socioeconomic status. In a study on first year students, Szulecka, Springett and De Pauw (1987) established that emotional factors, rather than academic factors, were the primary reason why students dropped out. Another factor that may contribute to student dropout rates includes the little support provided for students making the transition from school (CHE, 2010).

The effect of core self-evaluation traits and social support on dropout rates has been studied internationally and it has been reported that self-esteem may contribute towards academic achievement (Redenbach, 1991). It also seems that lower self-efficacy is associated with higher dropout (Harvey & McMurray, 1994; Laschinger, 1996). Various research studies have been conducted on the positive effects that social support has on students. Those students that receive academic, social and personal support are more likely to persevere and thus graduate from higher educational institutions (Tinto, 2002).

Although core self-evaluation traits and social support seem to be important predictors of the intention to drop out, few South African studies included these as possible predictors of dropout. In addition, student burnout and engagement as well as career decision making difficulties have rarely been included as possible predictors of students' intention to drop out, and no South African studies could be found that include these variables when investigating the intention to drop out. Previous research has emphasised that burnout and disengagement predict the intention to leave one's job (Maslach & Leiter, 1996).Therefore, it may also be possible that student burnout and disengagement may predict students' intention to drop out. Furthermore, students in

postsecondary education who are unsure of their vocational direction and who are not sufficiently academically prepared are likely to consider dropping out and later on actually drop out, not returning to the institution (Peterson, 1993).

Based on the above discussion, it seems important that possible predictors of students' intention to drop out be studied as this may benefit university students, society and academic institutions (Fike & Fike, 2008). The objective of this study was therefore to compare students with the intention to drop out with those students who have no intention to drop out in terms of core self-evaluation traits (self-esteem and self-efficacy), student burnout, student engagement, social support (social support from parents and general social support) and career decision making difficulties.

LITERATURE REVIEW

Students' intention to drop out

Student intention to drop out is defined as a decision making process from the preliminary thinking about leaving to the actual behaviour of leaving the institution (Bobko, 2001). There has been great irresolution in defining student dropout as there are many different outlooks. Some students may interrupt their studies for a variety of reasons and consider carrying on at a later stage. In another definition a student may cease his or her studies and may not graduate at all. Lastly, a student may change his or her subjects and leave the institution where he or she originally commenced (Georg, 2009). For the purposes of this study, the focus falls on students' intention to drop out of a higher education institution.

Student intention to drop out and core self-evaluation traits

According to Malbi and Reasoner (2000), self-esteem is the value that an individual sets on himself or herself and may either be positive or negative. Previous research has indicated that those individuals who value themselves have higher academic attainments. Individuals will focus and place emphasis on their strengths if they have a high self-esteem and put off negative thoughts when faced with challenges. Those individuals with a high self-esteem are also more likely to persevere through their higher education studies than those with a low self-esteem, who will withdraw when faced with poor grades (Dodgson & Wood, 1998). It is therefore expected that low self-esteem will predict an intention to drop out (Hypothesis 1a).

According to Bandura (1977), self-efficacy may be termed as an individual's self-beliefs in his or her competencies in order to produce achievements. It is most likely that self-efficacy beliefs will have an effect on the amount of effort put into given activities as well as the type of action individuals will choose to follow. Individuals with strong self-efficacy beliefs have stronger endurance levels when faced with obstacles, while those with weaker self-efficacy beliefs are easily affected by disconfirming experiences (Bandura, 1977).

Previous research has found that students with higher self-efficacy beliefs who are faced with obstacles and challenges are more likely to put in more effort and persevere longer than those

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who doubt themselves and their potential (Laschinger, 1996). Students are wasting their time and money and more likely to drop out when not believing in themselves (Noel & Levitz, Saluri, Delworth & Hanson, 1985). Harvey and McMurray (1994) also state that students with a low academic self-efficacy are more likely to think about dropping out compared to those students with a high level of academic self-efficacy. It is therefore expected that low levels of self-efficacy will predict an intention to drop out (Hypothesis 1b).

Student intention to drop out and student burnout and engagement

Burnout in students has been defined by Schaufeli, Martínez, Pinto, Salanova and Bakker (2002) as having feelings of exhaustion due to studying; leaving students feeling incompetent with a cynical and detached outlook towards their studies. Maslach, Leiter and Schaufeli (2008) reported that students feeling exhausted may feel worn out and experience a loss of energy, depletion, debilitation and fatigue. Students feeling uninterested in their studies while having a distant attitude towards their work may be experiencing cynicism (Schaufeli, Martínez et al., 2002). Further research claimed that cynicism may be related to lack of peer support as well as conflicting study demands (Lingard, Yip, Rowlinson & Kvan, 2007).

It has been stated that more than 40% of nurses in hospitals are experiencing high levels of burnout; as a consequence, about one in five have reported that they have an intention to quit their job (Vahey, Aiken ,Sloane, Clarke & Vargas, 2004). Furthermore, it has been reported in a previous study that emotional exhaustion which is an effect of burnout may lead to job dissatisfaction, decreased affective organisational commitment and high levels of intention to leave (Karatepe & Uludağ, 2007). Ramist (1981) noted that students experiencing burnout may well lead to higher absenteeism, lower motivation to do prescribed course work and higher percentage dropouts at college. Schaufeli et al. (2002) maintains that burnout may be negatively correlated with a student's success and furthermore have adverse effects on the student's life. There is little hesitation that burnout foresees student dropout, although not all intentions will lead to actual dropping out (Koeske & Koes, 1989; Lingard, 2003). Burnout has many negative implications for students and is characterised by a failure to remember classes, assignments and deadlines as well as a loss of meaning in their activities, shutting themselves off from opportunities provided by the institution and lastly dropping out (Welch, Mederios & Tate,

1982). It is therefore expected that high levels of burnout will predict an intention to drop out (Hypothesis 2a).

According to Schaufeli, Salanova, González-Romá and Bakker (2002), engagement is defined as a work-related state of mind that is characterised by vigour and dedication and has a positive sense of fulfillment. Vigour is termed as having mental resilience accompanied by elevated levels of energy while working with eagerness and the ability to expend a great deal of effort into ones work (Schaufeli et al., 2002). Dedication is defined as containing a sense of significance, enthusiasm, inspiration, pride and challenge (Schaufeli et al., 2002). Student engagement may be viewed as students dedicating their time towards educational activities and may also be seen as a significant predictor of student success (Pascarella & Terenzini, 2005).

According to Kortering and Christenson (2009), engagement has been linked to commitment and is said to be the effort expended on learning, identifying with the institution and participating in the institutions' activities in order to reach a particular goal. Those students who are engaged with their studies (feeling vigorous, dedicated, energetic, and absorbed with their studies) are therefore more likely to perform at higher levels and be successful (Schaufeli et al., 2002). The National Research Council (2004) stated that students who are disengaged from their studies and living in poverty may have the intention of dropping out. It is therefore expected that students with lower levels of engagement will have higher intentions to drop out (Hypothesis 2b).

Student intention to drop out and social support

Social support may be provided by the informal helping relationships between an individual and other individuals. In most cases these people are friends and family although an array of other individuals may also provide support (Cowen 1982). Social support is defined by Sarason, Levine, Basham and Sarason (1983) as the support and accessibility on which an individual can rely and that which allows an individual to feel that they are cared for and loved. Social support from parents is seen as the skills, learning, advice and guidance that a parent gives to their child (Desforges & Abouchaar, 2003). Support given by the broader family, peer groups, neighbourhood influences, institutions and churches, for instance, may be termed as general support (Desforges & Abouchaar, 2003).

Those students who receive academic, social and personal support will have greater perseverance and will most likely graduate from an institution (Tinto, 2002). According to Okun and Finch (1998), student involvement in campus committees may be a contributing factor when considering the intent to leave. Students who are in conflict situations with their peers may add to the intention of dropping out (Tinto, 1987). In a study conducted by Nora (2001), it was reported that social support received from others aided in students' adjustment and assisted them in the transition into the higher education institution. Furthermore, it had an influence on their academic performance as well as their social experiences. It also affected students' levels of commitment and had a significant influence on their intention to remain in the institution. It is therefore expected that students with low levels of support will have higher intentions to drop out (Hypothesis 3).

Student intention to drop out and career decision making difficulties

Students should be making career decisions based on the knowledge that they have of themselves (Nolte, Heyns & Venter, 1997). Most students have idealistic expectations of higher education institutions and their abilities of coping in a higher education setting. In order for a student to make a sound career decision he or she needs to go through continuous self-discovery to find out how he or she will fit into the world of work. Regrettably, for many students, this decision is but an accidental or mere quick decision or even a decision made by others on behalf of the student. As a result, the student will feel confused and in some unfortunate cases be unsuccessful (University of South Africa, 2009). It is therefore crucial that students have a lucid understanding of themselves, their aptitudes, abilities, interests, ambitions, resources and their limitations and its causes in order to make wise career decisions (Parson, 1909).

Gati, Krausz & Osipow, S. H et al. (1996) formulated a taxonomy of decision making difficulties in order to be able to recognise each individual's difficulties in the decision making process. The difficulties are divided into three clusters, namely, lack of readiness, lack of information and inconsistent information. Furthermore, a Career Decision Making Difficulty Questionnaire was developed based on the taxonomy of career decision making difficulties (Gati & Saka, 2001). The dimensions of the Career Decision Making Difficulty Questionnaire may be defined as follows (Gati et al., 2010):

- *Lack of readiness* includes three categories, namely, lack of motivation, indecisiveness and dysfunctional beliefs. Lack of motivation reflects a lack of willingness to make a decision or to take part in the decision-making process. Indecisiveness is the difficulty experienced when making decisions and dysfunctional beliefs may be referred to as the dysfunctional thoughts that an individual has about the decision making process.
- *Lack of information* includes four categories: lack of information about the decision making process, lack of information about the self, lack of information about occupations and lack of information about ways of obtaining information. Lack of information about the decision making process is characterised by the individual having a lack of knowledge on how to make a sound decision about his or her career. Lack of information about the self is characterised by the lack of knowledge an individual has on his or her career preferences, own abilities and potential. Lack of information about occupations is demonstrated as having a lack of information on various career options. Lack of information about ways of obtaining information is defined by a lack of information about ways of obtaining additional information that may aid in the career decision making process.
- *Inconsistent information* consists of three categories, namely unreliable information, internal conflict and external conflict. Unreliable information may be characterised by experiencing conflicting or unreliable information about the considered careers. Internal conflict is defined as the difficulty experienced by the individual in developing his or her identity. External conflict is characterised by inconsistent information between the individual's preferences and the preferences of significant others (Gati et al., 2010).

According to Hull-Blanks, Kurpius, Befort, Sollenberger, Nicpon & Huser, L. (2005), students will most likely have a low self-esteem and insufficient self-efficacy in their studies when they are not sure what their career goal is. Students who are undecided about their studies, facing career decision difficulties and who do not have an academic major or career path are less likely to be retained at the institution and possibly leave (Gaffner & Hazler, 2002). According to Peterson (1993), students in postsecondary education who are unsure of their vocational direction and only slightly academically prepared are likely to consider dropping out and later on actually drop out and do not return to the institution. It is therefore expected that career decision making difficulties will predict an intention to drop out (Hypothesis 4).

RESEARCH DESIGN

Research approach

A quantitative approach was used in this study with a cross-sectional survey design whereby data were collected by examining several groups of people at one point in time over a short period (Struwig & Stead, 2001).

Research method

Research participants

A non-probability quota sample of students at a higher education institution was used. Students in their first to sixth year received e-mails pertaining to the study. Because student and personnel numbers also serve as email addresses, it was not possible to distinguish between students and personnel. Therefore, the e-mail was sent out to students and personnel, with a comment at the beginning of the email indicating that only students should participate in the study. As a result, the response rate could not be calculated. A realised sample size of 782 was obtained. The characteristics of the sample population are displayed in Table 1.

Table 1

Characteristics of the Participants (*N* = 782)

Item	Category	Frequency	Percentage
Gender	Male	279	35,70
	Female	503	64,30
Age	18-20 years	314	40,10
	21-29 years	461	59,00
	30-39 years	5	0,60
	40-47 years	2	0,20
Race	White	713	91,20
	African	48	6,10
	Coloured	18	2,30
	Indian	2	0,30
Academic year	1st Year	214	27,40
	2nd Year	186	243,80
	3rd Year	206	26,30
	4th Year	115	14,70
	Postgraduate	61	7,80
Historical year	1st Year	206	26,30
	2nd Year	165	21,10
	3rd Year	190	24,30
	4th Year	141	18,00
	Postgraduate	80	10,20
Faculty	Faculty of Arts	64	8,20
	Faculty of Economic and Management Sciences	202	25,80
	Faculty of Education Sciences	72	9,20
	Faculty of Engineering	118	15,10
	Faculty of Law	61	7,80
	Faculty of Natural Sciences	117	15,00
	Faculty of Theology	10	1,30
	Faculty of Health Sciences	138	17,60
Career guidance	No	355	45,40
	Yes	427	54,60
Work experience	No	583	74,60
	Yes	199	25,40

Table 1 continued

Characteristics of the Participants (*N* = 782)

Item	Category	Frequency	Percentage
Help from parents	No	393	50,30
	Yes	389	49,70
Help from others	No	437	55,90
	Yes	345	44,10
Financial influence	No	648	82,90
	Yes	134	17,10
Changed course of study	No	639	81,70
	Yes	143	18,30
Considered occupation	No	118	15,10
	Yes	664	84,90
Sure about which career you will follow	I am very sure; I know exactly what career I will pursue	228	29,20
	I am fairly sure what career I will pursue	416	53,20
	I am not sure at all which career I will pursue	135	17,30
	I do not plan to follow a career	3	0,40

Table 1 indicates that the majority of the respondents were female (64,30%) between the ages of 21 and 29 years of age (59,00%). The participants were predominantly White (91,20%). The academic year was evenly distributed. Students from the Faculty of Theology were in the minority (1,30%). A total of 54,60% of the participants received career guidance, while 25,40% had some form of work experience. A total of 49,70% received assistance from their parents and 44,10% received assistance from others in making a choice of study and possible career. A total of 82,90% indicated that finances did not have an influence on their choice of study or possible career. The majority of the participants were fairly sure which career path they would like to follow.

Measuring instruments

The following questionnaires were used in the study:

Biographical questionnaire. This questionnaire was used to collect information on the participant's socio-demographic characteristics and enclosed questions on gender, age, and year of study as well as faculty. Supplementary questions were further incorporated in order to obtain external predictors. Questions pertaining to career guidance (e.g., "Did you receive career guidance / career counselling before you decided on a course of study?"), work experience (e.g., "Before you chose your degree / possible career, did you work in that environment or with someone already in the career that you considered?"), and guidance from parents or others in making a career decision (e.g., "Did your parent(s) or guardian(s) help you choose a course of study and possible career?" and e.g., "Did other people help you choose a course of study and possible career?") were enclosed in the questionnaire.

Core self-evaluation traits. Two core self-evaluation traits were measured, namely self-esteem and self-efficacy. Self-esteem was measured with Rosenberg's (1965) Self-Esteem Scale. The scale provided a measurement on attitudes about oneself and had five negatively worded and five positively worded items. Participants were requested to indicate their responses on a scale of 1 (Strongly disagree) to 5 (Strongly agree) with statements such as ("I have a positive attitude towards myself"). The Rosenberg scale is a widely used measure of self-esteem and has displayed good validity and reliability (Crandall, 1973; Rosenberg, 1965). The Cronbach alpha coefficient for self-esteem was 0,88 (Judge, Erez, Bono & Thoresen, 2003). Self-efficacy was measured using the Self-Efficacy Scale (Judge, Locke, Durham & Kluger, 1998). The scale consists of eight items (e.g., "I can handle the situations that life brings"), which were scored on a five-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree). Judge et al., (2003) reported a Cronbach alpha coefficient of 0,89 for self-efficacy.

Career decision-making difficulties. The Career Decision Making Difficulty Questionnaire (CDDQ) (Gati & Saka, 2001) was utilised to determine the difficulties students experience in

their decision making process. The questionnaire has 34 items and three clusters, namely lack of readiness, lack of information, and inconsistent information.

- *Lack if readiness* has three subscales, namely lack of motivation (three items, e.g., "Work is not the most important thing in one's life and therefore the issue of choosing a career does not worry me much"), indecisiveness (four items, e.g. "It is usually difficult for me to make decisions"), and dysfunctional beliefs (three items, e.g., "I expect that through the career I choose I will fulfil all my aspirations"). The Cronbach alpha coefficient for the lack of readiness scale was reported as 0,71 (Gati et al., 1996).

- *Lack of information* has four subscales, namely lack of information about the decision making process, (three items, e.g., "I believe that a career choice is a one-time choice and a life-long commitment"), lack of information about the self (eight items, e.g., "I find it difficult to make a career decision because I do not know how to combine the information I have about myself with the information I have about different careers"), lack of information about occupations (four items, e.g., "I find it difficult to make a career decision because I do not know what careers will look like in the future"), and lack of information about ways of obtaining information (two items, e.g., "I find it difficult to make a career decision because I do not know how to obtain accurate and updated information about existing occupations and training programmes, or about their characteristics"). The Cronbach alpha coefficient for the lack of information scale was reported at 0,91 (Gati et al., 1996).

- *Inconsistent information* has three subscales, namely, unreliable information (six items, e.g., "I find it difficult to make a career decision because I constantly change my career preferences"), internal conflicts (seven items, e.g., "I find it difficult to make a career decision because the occupation I am interested in involves a certain characteristic that bothers me"), and external conflicts (four items, e.g., "I find it difficult to make a career decision because there are contradictions between the recommendations made by different people who are important to me about the career that suits me or about what career characteristics should guide my decisions"). The Cronbach alpha coefficient for the inconsistent information scale was reported at 0,93 (Gati et al., 1996).

Items were scored on a nine-point Likert scale where respondents were requested to designate their level of agreement ranging from 1 ("Does not describe me") to 9 ("Describes me well")

(Albion & Fogarty, 2002). The Cronbach alpha for the total questionnaire was reported as 0,94 (Gati et al., 1996).

Social support. Two types of social support were measured by self-developed items. Social support from parents defined as the provision that parents give to their children in the form of skills, training, advice and guidance; and general support which is seen as social support from the broader family, peer groups, neighbourhood influences, institutions and other bodies (Desforges & Abouchaar 2003). Three items were utilised to measure parent support (e.g., "I always receive help from my parents or guardians when difficulties in my studies arise"). Four items were used to measure general support (e.g., "I have someone to whom I can talk about difficulties and problems"). The items were scored on a five-point Likert scale where respondents were asked to label their level of agreement ranging from 1 ("Totally agree") to 5 ("Totally disagree").

Student burnout. The Maslach Burnout Inventory-Student Survey (MBI-SS) was utilised to measure burnout levels (Schaufeli et al., 2002), including exhaustion (five items, e.g., "Studying or attending a class is really a strain for me"), and cynicism (five items, e.g., "I have become less interested in my studies since my enrolment at the university"). The items were scored on a seven-point frequency rating scale ranging from 0 (never) to 6 (everyday). In a study conducted by Mostert, Pienaar, Gauché and Jackson (2007), Afrikaans and Setswana speaking participants were selected at two campuses from a local university. The Cronbach alpha coefficients reported in the study were 0,74 for exhaustion and 0,68 for cynicism. Mostert et al. (2007) also provided evidence for the construct validity and reliability on the MBI-SS for South African university students. In another study conducted by Pienaar and Sieberhagen (2005), a sample of student leaders from the Students Representative Council and members of the House Committees from a local university were studied. Pienaar and Sieberhagen (2005) reported Cronbach alpha coefficients of 0,79 for exhaustion and 0,73 for cynicism.

Student engagement. The Utrecht Work Engagement Scale (UWES) (Schaufeli et al., 2002) was utilised for the purpose of this study to measure engagement, including vigour (six items, e.g., "I can continue for a very long time when I am studying"), and dedication (five items, e.g., "My studies inspire me"). The UWES was scored on a seven-point frequency rating scale, ranging

from 0 (never) to 6 (always). Pienaar and Sieberhagen (2005) found acceptable reliability coefficients for vigour ($\alpha = 0,77$) and dedication ($\alpha = 0,85$).

Intention to drop out. One item was used to measure this construct (e.g., "How often do you think about leaving the university before you finish your degree?"). Three options were given to answer the above mentioned question: 1) I never think about it; 2) I sometimes think about it; and 3) I always think about it. Categories two and three were grouped together with participants who were thinking about dropping out before they had completed their studies.

In order to measure the factorial validity of the measuring instruments, a Confirmatory Factor Analysis (CFA) was implemented by means of Mplus 6.1 (Muthén & Muthén, 2007). To accommodate the lack of multivariate normality in the item distribution the robust maximum likelihood estimator was utilised (Muthén & Muthén, 2007).

There were several problematic items recognised for the scales of the two core self-evaluation traits. Following repeated analyses the subsequent items were deemed appropriate for further analysis: items 1, 2, 5 and 7 for self-esteem and items 1, 3, 6 and 8 for self-efficacy. Once the problematic items were removed, an acceptable fit was obtained ($\chi^2 = 93,87$, CFI = 0,95 and TLI = 0,92; RMSEA = 0,07). The results supported a three-factor model for career decision making difficulties ($\chi^2 = 929,48$, CFI = 0,92 and TLI = 0,91; RMSEA = 0,06). The communalities of two items for the Lack of Motivation scale (items 2 and 3), one item of the General Indecisiveness scale (item 6) and one item of the Dysfunctional Beliefs scale (item 8) had very low communalities (ranging from 0,16 to 0,20). Furthermore, the Dysfunctional Beliefs scale did not load onto the higher order Readiness scale. As there were problems with the Readiness scale it was decided to only include the Lack of Information and Inconsistent Information scales in the subsequent analyses. A four-factor model for student burnout and student engagement were sustained. However, five items were problematic (low communalities and cross-loadings) and were discarded from the analysis. These items were exhaustion (item 2), cynicism (items 3 and 4), vigour (item 2) and dedication (item 5). Once these items were deleted the results supported a four-factor model for burnout and engagement ($\chi^2 = 284,67$, CFI = 0,95 and TLI = 0,93; RMSEA = 0,06).

Research procedure

Once permission had been granted from the institution to conduct the study, a letter requesting participants to participate in the study was e-mailed with a link that directed them to a protected site. The purpose of the study as well as the importance thereof was disclosed. Prior to commencing with the questionnaire a consent form was provided for completion. It was clearly stated that participation of the study was voluntary, and the confidentiality of participants was emphasised. Participants had the freedom to complete the questionnaire in their own time, as the progress on the questionnaire could be saved, if the participant wished to log off and carry on at a later stage.

Statistical analysis

The statistical analysis was performed by means of the SPSS program (SPSS, 2009). The data was analysed by making use of descriptive statistics (e.g., means and standard deviations). In determining the internal consistency of the variables, Cronbach alpha coefficients were utilised (Clark & Watson, 1995). A Cronbach alpha coefficient encompasses vital information regarding the proportion of variance of the items of a scale in terms of the total variance explained by the particular scale. The measured items were regarded as reliable if the coefficient was 0,70 or higher (Nunnally & Bernstein, 1994). Pearson product-moment correlation coefficients were used to specify the relationships between the constructs in order for a more accurate approximation of the direction and degree of the relationship to be attained. Effect sizes were used to determine the practical significance of the results (Steyn & Swanepoel, 2008). A cut-off point of 0,30 (medium effect) and 0,50 (large effect) was set for the practical significance of the correlation coefficients (Cohen, 1988). The confidence interval level for statistical significance was set at a value of 95% ($p \leq 0,05$).

Logistic regression was used to evaluate the probability of a certain occurrence; this was then based on the combination of values of the predictor variables (Tabachnick & Fidell, 2001). It was used for describing and testing hypotheses about relationships between a categorical outcome variable and one or more categorical or continuous predictor variables (Peng, Lee & Ingersoll 2002). It is vital to determine whether there is a relationship between students'

intention to drop out and the set of antecedents in the study. In order to simplify the model, it is necessary to find a relationship while still upholding a strong prediction. An equation was therefore utilised to predict new cases on a probabilistic basis. The students' category of "no intention to drop out" or "intention to drop out" was compared against certain socio-demographic characteristics, core self-evaluation traits, career decision making difficulties, social support, student burnout and, student engagement using χ^2 tests and analysis of variance (ANOVA). The variables that differed significantly ($p \leq 0,01$) were included in the logistic regression analysis.

Direct logistic regression was used and as the study was trying to measure the relationship between categories, data were entered into the analysis as 0 or 1 coding for the dichotomous outcomes (Peng et al., 2002). Furthermore, direct logistic regression was utilised to forecast whether students belong to the following category; "no intention to drop out" (coded 0) or "intention to drop out" (coded 1).

In order to test the fit of the logistic regression, the following statistics were evaluated: 1) overall model evaluation; 2) goodness-of-fit statistics; and 3) statistical tests of individual predictors (Peng et al., 2002).

Overall model evaluation. An improvement over the baseline was examined by using the likelihood ratio (Peng et al., 2002). According to Tabachnick and Fidell (2001), the log-likelihood is the summation of the probabilities with the predicted and real outcomes.

Goodness-of-fit statistics. To assess the fit of a logistic model against actual outcomes the goodness-of-fit statistics were utilised. The inferential goodness-of-fit test was the Hosmer–Lemeshow (H–L) (Peng et al., 2002). There were two additional descriptive measures of goodness-of-fit that were defined by Cox and Snell (1989) and Nagelkerke (1991). These indices were a distinction of the R^2 concept defined for the ordinary least squares regression model. R^2 may be defined as the proportion of the variation in the dependent variable that may be explained by predictors in the model (Peng et al., 2002).

Statistical tests of individual predictors. By using the Wald Chi-square statistic and the likelihood-ratio test, the statistical significance of individual regression coefficients (i.e. βs) was tested (Peng et al., 2002). Each group in the model was calculated by odds ratios (e^{β}) and 95% confidence intervals (CIs). A value greater than 1,00 would specify that as the predictor increased, the odds of the outcome increased, while a value less than 1,00 would specify that as the predictor increased, the odds of the outcome occurring decreased (Agresti , 1996).

RESULTS

The results of the descriptive statistics and reliability of the measuring instruments are provided in Table 2.

Table 2

Descriptive Statistics and Cronbach Alpha Coefficients of the Measuring Instruments

Dimension	*M*	*SD*	*α*
Self-esteem	4,31	0,72	0,83
Self-efficacy	4,19	0,72	0,79
Lack of information about the decision making process	4,04	2,29	0,91
Lack of information about the self	3,39	1,99	0,87
Lack of information about occupations	4,03	2,32	0,90
Lack of information about ways of obtaining information	3,47	2,13	0,79
Inconsistent information due to unreliable information	3,17	1,89	0,80
Inconsistent information due to internal conflict	3,37	1,78	0,81
Inconsistent information due to external conflict	2,65	1,98	0,81
Exhaustion	2,92	1,39	0,82
Cynicism	2,14	1,47	0,78
Vigour	3,63	1,28	0,82
Dedication	4,52	1,25	0,88
Support from parents	2,22	1,13	0,92
Support from others	1,95	0,93	0,90

Table 2 indicates that acceptable Cronbach's alpha coefficients for all the scales, weighed up against the guideline of $\alpha > 0,70$ (Nunnally & Bernstein, 1994), denoting that all the scales were reliable. Correlations between the dimensions are furnished in Table 3.

Table 3

Product-Moment Correlations Between the Study Variables

Item	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1 Drop out intention	-															
2 Self-esteem	-0,23**	-														
3 Self-efficacy	-0,18**	0,62**	-													
4 Lack of info about the DM process	0,13**	-0,26**	-0,29**	-												
5 Lack of info about the self	0,15**	-0,33**	-0,35**	0,72**	-											
6 Lack of info about occupations	0,11**	-0,21**	-0,24**	0,74**	0,78**	-										
7 Lack of info about ways of obtaining info	0,10**	-0,29**	-0,29**	0,70**	0,76**	0,79**	-									
8 Inconsistent info due to unreliable info	0,11**	-0,24**	-0,27**	0,62**	0,73**	0,68**	0,71**	-								
9 Inconsistent info due to internal conflict	0,14**	-0,27**	-0,29**	0,59**	0,69**	0,64**	0,64**	0,73**	-							
10 Inconsistent info due to external conflict	0,15**	-0,24**	-0,27**	0,39**	0,51**	0,44**	0,48**	0,56**	0,60**	-						
11 Exhaustion	0,24**	-0,24**	-0,24**	0,26**	0,28**	0,23**	0,25**	0,25**	0,30**	0,25**	-					
12 Cynicism	0,28**	-0,29**	-0,29**	0,34**	0,40**	0,31**	0,35**	0,37**	0,43**	0,39**	0,67**	-				
13 Vigour	-0,22**	0,28**	0,24**	-0,23**	-0,21**	-0,21**	-0,22**	-0,19**	-0,24**	-0,14**	-0,33**	-0,26**	-			
14 Dedication	-0,29**	0,37**	0,32**	-0,32	-0,37**	-0,30**	-0,32**	-0,31**	-0,39**	-0,29**	-0,41**	-0,52**	0,67**	-		
15 Support from parents	0,16**	-0,24**	-0,10**	0,18**	0,17**	0,18**	0,16**	0,14**	0,16**	0,20**	0,22**	022**	-0,18**	-0,28**	-	
16 Support from others	0,19**	-0,32**	-0,26**	0,26**	0,28**	0,27**	0,29**	0,25**	0,29**	0,26**	0,22**	0,25**	-0,18**	-0,28**	0,64**	-

**Correlation is significant at the 0,01 level (2-tailed).

*Correlation is significant at the 0,05 level (2-tailed).

$\geq$ 0,30 is practically significant (medium effect); $\geq$ 0,50 is practically significant (large effect).

Student intention to drop out was positively and statistically significantly correlated with cynicism ($r = 0,28$, $p \leq 0,01$) and exhaustion ($r = 0,24$, $p \leq 0,01$. Student intention to drop out was negatively, statistically and practically significantly correlated with self-esteem ($r = -0,23$, $p \leq 0,01$), self-efficacy ($r = -0,18$, $p \leq 0,01$), vigour ($r = -0,22$, $p \leq 0,01$) and dedication ($r = -0,29$, $p \leq 0,01$).

Associations between the participants and career uncertainty are reported in Table 4.

Table 4

Associations Between Socio-Demographic Characteristics and Participants Intention to Drop out

	Not Drop out		Drop out		χ^2	df	p value	Cramer's V
	N	%	N	%				
Gender								
Males	177	22,70%	101	12,90%	0,04	1	$p = 0,11$	0,01
Females	324	41,50%	179	22,90%				0,11
Academic Year								
1st year	129	16,50%	85	10,90%	9,85	7	$p = 0,20$	
2nd year	118	15,10%	68	8,70%				
3rd year	134	17,20%	72	9,20%				
4th year	81	10,40%	34	4,40%				
Postgraduate	39	5,00%	21	2,70%				
Faculty								
Arts	37	4,70%	27	3,50%				
Economic and Management Sciences	138	17,70%	64	8,20%				
Education Sciences	42	5,40%	30	3,80%				
Engineering	73	9,30%	44	5,60%				
Law	39	5,00%	22	2,80%				
Natural Sciences	80	10,20%	37	4,70%				
Theology	3	0,40%	7	0,90%				
Health Sciences	89	11,40%	49	6,30%				
Career guidance								
Did not receive guidance	218	27,90%	136	17,4%	1,86	1	$p = 0,17$	0,05
Received guidance	283	36,20%	144	18,40%				
Work Experience								
Have no work experience	373	47,80%	209	26,80%	0,00	1	$p = 0,95$	0,00
Have some work experience	128	16,45	71	9,10%				
Help from parents								
Did not receive help from parents when making a career decision	249	31,90%	144	18,40%	0,22	1	$p = 0,64$	0,02
Received help from parents when making a career decision	525	32,30%	136	17,40%				

Table 4 continued

Associations Between Socio-Demographic Characteristics and Participants Intention to Drop out

	Not Drop Out		Drop out		χ	df	p Value	Cramer's V
	N	%	N	%				
Help from others								
Did not receive help from others when making a career decision.	281	36,00%	155	19,80%	0,04	1	p = 0,84	0,01
Received help from others when making a career decision.	220	28,20%	125	16,00%				
Financial Influence								
Financial costs did not influence my course of study.	426	54,50%	221	28,30%	4,70	1	p = 0,03*	0,08
Financial costs influenced my course of study.	75	9,60%	59	7,60%				
Changed course of study								
No	413	52,90%	226	28,90%	0,36	1	p = 0,55	0,02
Yes	88	11,30%	54	6,90%				
Considered Occupation								
Have not considered which occupation will be chosen after your studies.	61	7,80%	57	7,30%	9,37	1	p = 0,00*	0,11
Have considered which occupation will be chosen after your studies.	440	56,30%	223	28,60				
Sure about which career you will follow								
I am very sure, I know exactly which career I will pursue	154	19,70%	74	9,50%	14,11	3	p = 0,00*	0,13
I am fairly sure which career I will pursue	278	35,60%	138	17,70%				
I am not sure at all which career I will pursue	67	8,60%	67	8,60%				
I do not plan to follow a career	2	0,30%	1	0,10%				

* Significant at the 0,05 level

As Table 4 demonstrates, the only significant differences were found for financial influence, considered occupation as well as the extent of being sure about which career to follow. As a result, only these variables were controlled for in the logistic regression analysis.

Associations between internal antecedents, outcomes thereof and the intention to drop out are reported in Table 5.

Table 5

Associations Between the Predictor Variables and Intention to Drop Out

Item	No intention to drop out		Intention to drop out		ANOVA
	M	*SD*	*M*	*SD*	
Self-esteem	4,44	0,62	4,09	0,84	$F = 43,86, df = 1,00$[**]
Self-efficacy	4,28	0,68	4,02	0,76	$F = 25,12, df = 1,00$[**]
Lack of info about the DM process	3,82	2,30	4,42	2,22	$F = 12,62, df = 1,00$[**]
Lack of info about the self	3,17	1,91	3,78	2,05	$F = 17,36, df = 1,00$[**]
Lack of info about occupations	3,83	2,29	4,35	2,32	$F = 9,07, df = 1,00$[**]
Lack of info about ways of obtaining info	3,31	2,08	3,74	2,20	$F = 7,14, df = 1,00$[**]
Inconsistent info due to unreliable info	3,01	1,83	3,46	1,97	$F = 10,10, df = 1,00$[**]
Inconsistent info due to internal conflict	3,19	1,75	3,70	1,81	$F = 15,23, df = 1,00$[**]
Inconsistent info due to external conflict	2,43	1,83	3,02	2,16	$F = 16,65, df = 1,00$[**]
Exhaustion	2,67	1,34	3,36	1,36	$F = 47,19, df = 1,00$[**]
Cynicism	1,83	1,36	2,69	1,51	$F = 67,22, df = 1,00$[**]
Vigour	3,84	1,22	3,26	1,31	$F = 37,61, df = 1,00$[**]
Dedication	4,79	1,10	4,03	1,36	$F = 73,13, df = 1,00$[**]
Support from parents	2,08	1,10	2,46	1,14	$F = 21,41, df = 1,00$[**]
Support from others	1,82	0,90	2,18	0,93	$F = 27,97, df = 1,00$[**]

[**]Statistically significant difference: $p \leq 0,01$

As evident in Table 5, statistically significant differences were found between all the variables ($p \leq 0,01$ level). All of the variables were therefore included in the logistic regression analysis.

The results of the logistic regression models are reported in Table 6.

Table 6

Logistic Regression Models Predicting Intention to Drop Out

Model	Predictor	β	$SE\ \beta$	Wald's χ^2	df	p	e^{β}	95% CI for e^{β}
1	Constant	-0,71	0,34	4,26	1	0,04*	0,49	
	Financial Influence	0,42	0,20	4,64	1	0,03*	1,52	(1,04 - 2,23)
	Considered Occupation	-0,46	0,22	4,60	1	0,03*	0,63	(0,41 - 0,96)
	Sure about which career you will follow	0,23	0,12	3,92	1	0,05*	1,26	(1,00 - 1,59)
	Overall model evaluation		Value	χ^2	df	p		
	Likelihood ratio test		1001,70	17,60	3	0,00*		
	Hosmer & Lemeshow			2,10	3	0,55		
2	Constant	2,45	0,67	13,39	1	0,00*	11,53	
	Financial Influence	0,40	0,20	3,90	1	0,05*	1,49	(1,00 - 2,20)
	Considered Occupation	-0,42	0,22	3,57	1	0,06	0,66	(0,42 - 1,02)
	Sure about which career you will follow	0,09	0,12	0,56	1	0,45	1,10	(0,86 - 1,40)
	Self-esteem	-0,52	0,14	14,72	1	0,00*	0,059	(0,46 - 0,78)
	Self-efficacy	-0,17	0,14	1,49	1	0,22	0,85	(0,65 - 1,11)
	Overall model evaluation		Value	χ^2	df	p		
	Likelihood ratio test		967,11	34,60	2	0,00*		
	Hosmer & Lemeshow			11,54	8	0,17		
3	Constant	1,83	0,83	4,87	1	0,03*	6,20	
	Financial Influence	0,27	0,21	1,65	1	0,20	1,31	(0,87 - 1,96)
	Considered Occupation	-0,20	0,23	0,72	1	0,40	0,82	(0,52 - 1,30)
	Sure about which career you will follow	-0,06	0,13	0,24	1	0,63	0,94	(0,73 - 1,21)
	Self-esteem	-0,37	0,14	6,61	1	0,01*	0,69	(0,52 - 0,92)
	Self-efficacy	-0,02	0,14	0,01	1	0,91	0,98	(0,74 - 1,30)
	Exhaustion	0,10	0,08	1,42	1	0,23	1,10	(0,94 - 1,29)
	Cynicism	0,20	0,08	5,83	1	0,02*	1,22	(1,04 - 1,43)
	Vigour	-0,10	0,09	1,18	1	0,28	0,91	(0,77 - 1,08)
	Dedication	-0,21	0,10	4,50	1	0,03*	0,81	(0,67 - 0,98)
	Overall model evaluation		Value	χ^2	df	p		
	Likelihood ratio test		916,360	50,75	4	0,00*		
	Hosmer & Lemeshow			2,97	8	0,94		

Table 6 continued

Logistic Regression Models Predicting Intention to Drop Out

Model	Predictor	β	$SE\ \beta$	Wald's χ^2	df	p	e^β	95% CI for e^β
4	Constant	1,25	0,89	2,00	1	1,16	3,49	
	Financial Influence	0,23	0,21	1,24	1	0,27	1,26	(0,84 - 1,90)
	Considered Occupation	-0,18	0,24	0,56	1	0,46	0,84	(0,53 - 1,33)
	Sure about which career you will follow	-0,07	0,13	0,28	1	0,60	0,93	(0,72 - 1,21)
	Self-esteem	-0,33	0,15	5,04	1	0,03*	0,72	(0,54 - 0,96)
	Self-efficacy	-0,02	0,14	0,01	1	0,92	0,99	(0,74 - 1,31)
	Exhaustion	0,09	0,08	1,18	1	0,28	1,09	(0,93 - 1,28)
	Cynicism	0,19	0,08	5,44	1	0,02*	1,21	(1,03 - 1,42)
	Vigour	-0,10	0,09	1,33	1	0,25	0,90	(0,76 - 1,07)
	Dedication	-0,19	0,10	3,71	1	0,05*	0,83	(0,68 - 1,00)
	Support from parents	0,04	0,09	0,22	1	0,64	1,05	(0,87 - 1,26)
	Support from others	0,13	0,12	1,34	1	0,25	1,14	(0,91 - 1,43)
	Overall model evaluation		Value	χ^2	df	p		
	Likelihood ratio test		912,89	3,47	2	0,18		
	Hosmer & Lemeshow			5,04	8	0,75		
5	Constant	1,66	0,94	3,13	1	0,08	5,26	
	Financial Influence	0,25	0,21	1,33	1	0,25	1,28	(0,84 - 1,94)
	Considered Occupation	-0,27	0,25	1,22	1	0,27	0,76	(0,47 -1,24)
	Sure about which career you will follow	-0,05	0,15	0,10	1	0,75	0,96	(0,72 - 1,27)
	Self-esteem	-0,35	0,15	5,57	1	0,02*	0,71	(0,53 - 0,94)
	Self-efficacy	-0,02	0,15	0,02	1	0,88	0,98	(0,73 - 1,31)
	Exhaustion	0,09	0,08	1,28	1	0,26	1,10	(0,93 - 1,29)
	Cynicism	0,21	0,08	5,92	1	0,02*	1,23	(1,04 - 1,45)
	Vigour	-0,11	0,09	1,47	1	0,23	0,90	(0,76 - 1,07)
	Dedication	-0,20	0,10	4,00	1	0,05*	0,82	(0,67 - 1,00)
	Support from parents	0,02	0,10	0,03	1	0,86	1,02	(0,84 - 1,23)
	Support from others	0,18	0,19	2,21	1	0,14	1,19	(0,95 - 1,50)
	Lack of info about the DM process	0,02	0,06	0,10	1	0,76	1,02	(0,91 - 1,14)
	Lack of info about the self	0,02	0,08	0,07	1	0,80	1,02	(0,87 - 1,20)
	Lack of info about occupations	0,04	0,07	0,31	1	0,58	1,04	(0,91 - 1,19)
	Lack of info about ways of obtaining info	-0,15	0,07	3,95	1	0,05*	0,87	(0,75 - 1,00)
	Inconsistent info due to unreliable info	0,01	0,07	0,01	1	0,92	1,01	(0,87 - 1,17)

Table 6 continued

Logistic Regression Models Predicting Intention to Drop Out

Model	Predictor	β	$SE\ \beta$	Wald's χ^2	df	p	e^{β}	95% CI for e^{β}
	Inconsistent info due to internal conflict	-0,05	0,08	0,50	1	0,48	0,95	(0,82 - 1,10)
	Inconsistent info due to external conflict	0,05	0,05	0,81	1	0,37	1,05	(0,95 - 1,16)
	Overall model evaluation	Value	χ^2	df	p			
	Likelihood ratio test	906,67	6,22	7	0,51			
	Hosmer & Lemeshow		0,71	8	1,00			

Note: All statistics are presented for all variables in the logistic regression equations. For Model 1, Cox and Snell $R^2 = 0,02$ and Nagelkerke $R^2 = 0,03$; for Model 2 Cox and Snell $R^2 = 0,07$ and Nagelkerke $R^2 = 0,09$; for Model 3 Cox and Snell $R^2 = 0,12$ and Nagelkerke $R^2 = 0,17$; for Model 4, Cox and Snell $R^2 = 0,13$ and Nagelkerke $R^2 = 0,18$; for Model 5 Cox and Snell $R^2 = 0,13$ and Nagelkerke $R^2 = 0,18$.

Table 6 exhibits the results of the logistic regression model. βs denotes the logistic regression coefficients, thus a positive βs illustrates a positive relationship while a negative βs illustrates a negative or inverse relationship. The odds (e^{β}) are much easier and straightforward to interpret compared to βs (log odds). The odds of 1 are equivalent to log odds of 0. Odds of 1 and log odds of 0 point to no relation of the independent variable to the dependent variable. The odds are the probability that an event will happen divided by the probability that the event will not happen (Norusis, 1994).

As evident in Table 6, entering financial influence, considered occupation and extent of being sure of which career to pursue in the first step of the logistic regression, produced a significant model. In this model the significant predictors of the intention to drop out were financial influence [$\beta = 0,42$ (1,04 - 2,23); $p \leq 0,05$], considered occupation [$\beta = -0,46$ (0,41 - 0,96); $p \leq 0,05$] and extent of being sure of which career to pursue [$\beta = 0,23$ (1,00 - 1,59); $p \leq 0,05$]. In step two, self-esteem and self-efficacy were entered, and a significant model was produced. The significant predictors in this model were financial influence [β = 0,40 (1,00 - 2,20); $p \leq 0,05$] and self-esteem [β = -0,52 (0,46 - 0,78); $p \leq 0,05$]. In step three, exhaustion, cynicism, vigour, and dedication were entered. Again, a significant model was produced. The significant predictors of the intention to drop out in this model were self-esteem [$\beta = -0,37$ (0,52 - 0,92); $p \leq 0,05$], cynicism [$\beta = 0,20$ (1,04 - 1,43); $p \leq 0,05$] and dedication [$\beta = -0,21$

(0,67 - 0,98); $p ≤ 0,05$]. An insignificant model was produced when entering support from parents and support from others in step four. However, significant predictors in this model were self-esteem [$β = -0,33$ (0,54 - 0,96); $p ≤ 0,05$], cynicism [$β = 0,19$ (1,03 - 1,42); $p ≤ 0,05$] and dedication [$β = -0,19$ (0,68 - 1,00); $p ≤ 0,05$]. In the final step of the logistic regression, lack of information about the decision making process, lack of information about the self, lack of information about occupations, lack of information about ways of obtaining information, inconsistent info due to unreliable information, inconsistent information due to internal conflict and inconsistent information due to external conflict were entered and an insignificant model was produced. In this step, the predictors of the intention to drop out were self-esteem [$β = -0,35$ (0,53 - 0,94); $p ≤ 0,05$], cynicism [$β = 0,21$ (1,04 - 1,45); $p ≤ 0,05$], dedication [$β = -0,20$ (0,67 - 1,00); $p ≤ 0,05$], and lack of information about ways of obtaining information [$β = -0,15$ (0,75 - 1,00); $p ≤ 0,05$]. These results provide support for Hypothesis 1a and partial support for Hypotheses 2a, 2b and 4. No support was found for the other hypotheses.

DISCUSSION

Research has revealed that student intention to drop out is a great dilemma for students. As the Council on Higher Education (2000) pointed out, students' dropout rates are currently costing the tax payer about R1.3 billion per annum. Few studies have been carried out regarding the predictors of student intention to drop out, especially when comparing possible predictors of those having no intention to drop out versus those with an intention to drop out and the relationship with core self-evaluation traits, student burnout, student engagement, social support and the career decision making process. The aim of this study was to determine the significant predictors of student intention to drop out. Predictors included were core self-evaluation traits (self-esteem and self-efficacy), student burnout, student engagement, social support (social support from parents and general social support) and career decision making difficulties.

In order to determine if significant relationships exist between socio-demographic characteristics and student intention to drop out Chi-square tests were used. Statistically significant differences were found for financial influence, considered occupation and the extent that the student is sure of which career to follow. It was therefore decided to only include these predictors in the logistic regression analyses. In order to determine if

statistically significant relationships existed between student intention to drop out and core self-evaluation traits, burnout, engagement, social support and career decision making difficulties, ANOVA analyses were carried out. Statistically significantly differences were found for all the variables on a $p \leq 0,01$ level.

The results provided support for Hypotheses 1a which suggest that students who experience lower levels of self-esteem are inclined to have an intention to drop out, as self-esteem was found to be significant in the last step of the regression model. Therefore, those individuals who have high self-esteem levels believe their input is important and will have lower intentions to drop out. This is supported by Malbi and Reasoner (2000) who stated that those individuals who value themselves will have higher academic attainments and will place emphasis on their strengths and put off negative thoughts when faced with challenges. Individuals with a high self-esteem will more likely persevere in attaining a degree than those with a low self-esteem, who will withdraw when faced with poor grades (Dodgson & Wood, 1998). Therefore it may be said that self-esteem influences the intention to drop out.

The results did not provide support for Hypotheses 1b which suggests that students who experience lower levels of self-efficacy are inclined to have an intention to drop out which is in contrast to the literature in the study. According to Bandura (1977), those individuals with low self-efficacy beliefs are easily affected when confronted with difficulties unlike those individuals with higher self-efficacy beliefs who possess stronger endurance levels when faced with difficulties. Students with low academic self-efficacy will consider dropping out compared to those students with high academic self-efficacy (Harvey and McMurray, 1994).

Hypothesis 2a suggests that students with an intention to drop out will experience higher burnout levels. Hypothesis 2a is partially accepted as only cynicism was a significant predictor of the intention to drop out in the logistic regression model. This corresponds with previous research suggesting that students experiencing burnout could well lead to higher absenteeism, lower motivation to do prescribed course work and a higher percentage dropout rate (Ramist, 1981).

The results also provide support for Hypothesis 2b, which suggests that students with an intention to drop out will experience lower levels of engagement, although only dedication was a significant predictor in the logistic regression model. Therefore, Hypothesis 2b is

partially accepted. The results are in line with previous studies. According to the National Research Council (2004), students who are disengaged from their studies and living in poverty may have an intention of dropping out of an institution.

The results do not provide support for Hypothesis 3, which advocates that social support is a significant predictor of the intention to drop out. This finding contradicts previous literature that suggested that students who receive academic, social and personal support, have vast endurance levels and are most likely to graduate (Tinto, 2002). According to Nora (2001), students receiving social support from others had an influence on their academic performance and commitment levels which had a significant influence on their intention not to drop out.

Hypothesis 4, which suggests that career decision making difficulties are predictive of student intention to drop out, is partially accepted as only lack of information about ways of obtaining information was a significant predictor in the logistic regression model. The results of this study confirm previous research which found that when individuals have a lack of information about ways of obtaining it, it indicates that individuals have incomplete information to assist in the decision making process (e.g., where to find career guidance advice), thus this may intensify career uncertainty (Gati & Osipow, 2010). Peterson (1993) reported this as the reason why students in postsecondary education, who are unsure of their vocational direction, are more likely to consider dropping out.

There has been little research conducted on the intention to drop out especially in South Africa, more so on the predictors of the intention to drop out. This study contributes towards literature on the intention to drop out by proving additional information on the predictors of the intention to drop out. By gaining more valuable information on the intention to drop out, it may assist institutions in identifying possible risk students before granting them access into their institution. Furthermore, it may assist students in their career decision making process. Lastly, it may assist organisations in the longer term as higher education institutions may improve their dropout rates through possible interventions and thereby uplift the economy of South Africa. The main findings of this study showed that the predictors of the intention to drop out were self-esteem, cynicism, dedication and lack of information on ways of obtaining information. These predictors were all significant on the $p \leq 0{,}05$ level.

Limitations and Recommendations

Several limitations were identified in this study. Firstly, a non-probability quota sample was used, thus the results cannot be generalised to a larger population and might not be true for all individuals. Secondly, a cross-sectional design was used (Salkind, 2009), thus causality of the relationship between the predictors and the intention to drop out could not be established. Thirdly, the study was conducted on a student sample of one specific university (Amir & Gati, 2006), which renders it difficult to generalise the results to other universities. Therefore the predictors of the intention to drop out could differ amongst students from other universities. The study sample is racially homogeneous, thus meaning that the results could differ for all individuals within the South African context as different races could experience different predictors. Lastly, the results were obtained by self-reporting measures (Di Fabio & Pallazzeshi, 2009), which could lead to a method bias. As individuals' perceptions are being measured, it creates a difficulty, as it is problematic to measure between the actual construct being measured.

For future research it is recommended that longitudinal research be conducted in order to determine the effects of the intention to drop out and whether the predictors included in this study could rather be outcomes of the intention to drop out. Although the results only found that self-esteem was a significant predictor of the intention to drop out, other possible core self-evaluation traits are recommended to be studied as possible predictors for future studies as this could identify students at risk to leave an institution. Further research is recommended to explore whether student burnout and engagement are possible outcomes of the intention to drop out and the influence this might have on individuals within the organisational context.

Furthermore, research could be conducted on predictors of the intention to drop out which were found in the literature but were not included in this study, for example socio-economic status of the students' families (Human Sciences Research Council, 2007) and emotional factors (Szuleka, Springeti & de Pauw, 1987). This could further the literature on the intention to drop out and aid in possible future interventions. There is little literature on the difficulties students face in making career decisions and the intention to drop out. It is therefore recommended that more research be carried out on this topic.

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CHAPTER 3

CONCLUSIONS, LIMITATIONS AND RECOMMENDATIONS

In this chapter, conclusions regarding the results of the study are presented according to the general and specific objectives. The limitations of the research, as well as recommendations for future research and for the organisation, are discussed.

3.1 CONCLUSIONS

The general objective of this study was to investigate the possible predictors of student intention to drop out and to compare those students with no intention to drop out versus those with an intention to drop out. The specific objectives were to 1) conceptualise the possible predictors of student intention to drop out according to the literature; 2) determine if self-evaluation traits (self-esteem and self-efficacy) are significant predictors of student intention to drop out; 3) determine if student burnout and student engagement are significant predictors of student intention to drop out; 4) determine if social support (social support from parents and general social support) are significant predictors of student intention to drop out; 5) determine if career decision-making difficulties are significant predictors of student intention to drop out; and 6) make recommendations for future research.

According to Bobko (2001), student intention to drop out may be conceptualised as the decision-making process that an individual will go through from the initial thought about leaving to the actual action of leaving the institution. There have been various definitions on student dropout as it may be viewed from different stand points, and therefore no universal definition of student dropout exists. In extreme cases, students may quit their studies and not graduate. In another definition, the student may freeze his or her studies for many reasons and carry on at a later point in time. Lastly, a student may change his or her subjects or major or leave the institution where he initially commenced his studies (Georg, 2009). The predictors of a student's intention to drop out as found in the literature and also incorporated in this research, were self-core evaluation traits (self-esteem and self-efficacy), student burnout and student engagement, social support (social support from parents and general social support) and career decision-making difficulties.

The second objective of this study was to conclude whether core self-evaluation traits (self-esteem and self-efficacy) are significant predictors of student intention to drop out. In order to determine whether such a relationship exists, an ANOVA analysis was carried out. Self-esteem and self-efficacy were found to have significant differences on a $p \leq 0,01$ level. Although the core self-evaluation traits were found to be significant in the ANOVA, only self-esteem was found to be a significant predictor of intention to drop out. Individuals with low self-esteem levels are likely to leave their studies when attaining poor grades, unlike individuals with high self-esteem levels who will likely persevere in attaining a degree (Dodgson & Wood, 1998). Therefore, it may be said that self-esteem influences intention to drop out.

The third objective of the study was to establish whether student burnout and student engagement are significant predictors of student intention to drop out. In order to determine whether there is a relationship, an ANOVA analysis was carried out. A statistically significant relationship was found for student burnout and student engagement on a $p \leq 0,05$ level. Exhaustion, cynicism, vigour and dedication were entered into the logistic regression model. Only cynicism and dedication were significant predictors of student intention to drop out in the final step of the regression. In defining cynicism, it may be explained as the indifference or distant attitude towards work in general, not necessarily with other people (Schaufeli, Martínez, Pinto, Salanova & Bakker, 2002). Cynicism is a construct of burnout. Burnout in students refers to feeling exhausted due to study demands, thus making students feel incompetent, resulting in a cynical and detached outlook towards their studies. Dedication is said to be a sense of significance, enthusiasm, inspiration, pride, and challenge (Schaufeli et al., 2002). Schaufeli et al. (2002) reported that there is evidence of increased levels of performance amongst students feeling engaged in their studies. In addition, students feeling energetic and absorbed in their studies are most likely dedicated and will be successful in their studies. Thus, students suffering from burnout may encounter higher absenteeism, lower motivation to do prescribed course work, and higher percentage will drop out (Ramist, 1981). Students feeling disengaged in their studies are prone to experience intention to drop out of an institution (National Research Council, 2004). Therefore, burnout and engagement may be seen as partial significant predictors of intention to drop out.

The fourth objective of the study was to determine whether social support (social support from parents and general social support) are significant predictors of student intention to drop

out. ANOVA was performed to determine whether such a relationship exists. Statistically significant differences were found for social support from parents and general social support on a $p < 0,01$ level. Although both social support predictors were significant in the ANOVA analyses, they were not significant in the logistic regression model. This contrasted with the research obtained in the literature that stated otherwise. According to literature, students who receive academic, social and personal support are mostly likely to graduate as they possess greater perseverance levels (Tinto, 2002). Previous research carried out by Nora (2001) stated that students who receive social support from others helped students with their adjustment to the institution as well as their transition from high school. Furthermore, support exerted an influence on their academic performance and commitment levels which had a significant influence on their intention to not drop out. Therefore, based on the aforementioned literature, it may be said that students with low levels of support will experience higher levels of intention to drop out, but this was not supported in this study.

The fifth objective of this study was to determine whether career-decision making difficulties are significant predictors of student intention to drop out. It was found that lack of information about ways of obtaining information was a significant predictor of intention to drop out. Hence, when individuals experience a lack of information about ways of obtaining information it indicates that individuals have incomplete information that could help them in the decision-making process (e.g., where to find a career guidance advice). Consequently, this may intensify career uncertainty (Gati & Osipow, 2010), which according to Peterson (1993), students in postsecondary education who are unsure of their vocational direction are most likely to consider dropping out.

3.2 LIMITATIONS OF THIS RESEARCH

A non-probability quota sample was used for the research method, thus results might not be accurate for all individuals and cannot be generalised to a larger population. Furthermore, certain information may be over-exaggerated due to the availability of the sample population, and the results could also not be accurate for all individuals experiencing intention to drop out. A cross-sectional research design was used in order to gather data at one point in time over a short period (Salkind, 2009) and could be viewed as another limitation. The down side of this method is that the relationship between the predictors and intention to drop out could

not be measured. Furthermore.it does not supply information on the progression of events over a period. Another limitation for this study is the fact that the study was conducted at only one university (Amir & Gati, 2006) thus rendering it difficult to generalise the results to other universities. Furthermore, the study population was racially homogeneous. The results may differ for the South African population as different races and languages may experience certain predictors of intention to drop out differently.

3.3 RECOMMENDATIONS

3.3.1   Recommendations for practice

Universities should provide first time entering university students with an orientation programme explaining all courses offered, their benefits, their limitations and any additional internships needed to be completed after their studies. Career guidance should also be provided in this orientation programme. By informing students from the beginning, could make them fully aware of each course offered, which might facilitate a better career choice. Throughout the course of the student's studies, career guidance services should be offered, especially to those students with an intention to drop out. Students completing their studies in the minimum amount of time will save on their tuition fees and the university will receive government grants. Therefore, the importance of doing well and persevering in ones studies should be emphasised year on year by motivating students. Financial assistance should be provided as well as communicated with regards to enrolment so as to ensure that students do not stop their studies due to financial implications.

3.3.2.   Recommendations for future research

It is recommended that longitudinal research be conducted to determine the effects of intention to drop out and whether the possible predictors included in this study could be outcomes of intention to drop out. It is recommended that further research be conducted on the possible predictors of core self-evaluation traits as in this study only self-esteem was found to be a possible predictor. By conducting further research on core self-evaluation traits,this might assist institutions in identifying possible risk students who may want to leave their institution.

According to the literature conducted in this study, it was found that social support is not a significant predictor of intention to drop out. This was found to be contradictory to previous literature that suggested that receiving social support from others influenced their academic performance and commitment levels which in turn had a significant influence on their intention to not to drop out (Nora, 2001). Thus, further research should be carried out regarding this possible predictor in order to determine if social support is in fact a possible predictor of student intention to drop out. This could further the literature on intention to drop out and aid in possible future interventions.

Future research may be conducted on other possible predictors of student intention to drop out found in literature, but were not carried out in this study. According to literature, socio-economic status of the student's families (Human Sciences Research Council, 2007) and emotional factors (Szuleka, Springeti & de Pauw, 1987) were found to be possible predictors; this could be further investigated.

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