

Credit usage intentions amongst Generation Y students

PJ van Schalkwyk

 orcid.org/0000-0002-6800-4978

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Promoter: Prof AL Bevan-Dye

Co-promoter: Prof N de Klerk

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Student number: 11992069

DECLARATION

I, **PJ van Schalkwyk**, declare that **CREDIT USAGE INTENTIONS AMONGST GENERATION Y STUDENTS** is my own work and that all the sources I have used or quoted have been indicated and acknowledged by means of complete references and that this thesis has not previously been submitted for a degree at any other university.

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Study Leader / Promoter / Author(s)	Prof A Bevan-Dye		
	Prof N de Klerk		
STUDENT / AUTHOR			
Name	van Schalkwyk PJ		
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19 September 2016 ..
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RESEARCH DIRECTOR

19 September 2016 ..
DATE

LETTER FROM THE LANGUAGE EDITOR

Ms Linda Scott
English language editing
SATI membership number: 1002595
Tel: 083 654 4156
E-mail: lindascott1984@gmail.com

16 November 2018

To whom it may concern

This is to confirm that I, the undersigned, have language edited the thesis of

Pieter van Schalkwyk

for the degree

Doctor of Philosophy in Marketing Management

entitled:

Credit usage intentions amongst Generation Y students

The responsibility of implementing the recommended language changes rests with the author of the thesis.

Yours truly,



Linda Scott

PREFACE

I thank God for the ability to complete this study.

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ABSTRACT

Keywords: consumer credit, Generation Y, credit, debt, student loans, finance, materialism, status consumption, image consciousness, social comparison, impulsive buying, credit intentions.

Part of modern consumerism is the switch from buying with cash to buying on credit. This is a global trend and consumers are spending more and saving less. Banks and retailers are taking full advantage of this fact and are encouraging consumers to open accounts and to buy on credit. Students are a prime target due to their future earning potential and many students are heavily indebted by the time they graduate. South Africa has more than 20 million credit-active consumers of whom approximately half are in arrears with their payments. The South African government, realising the extent of the problem, enacted the National Credit Act (NCA), which has been credited for somewhat shielding South Africa from the worst of the 2008 global recession. A recession many blame on the easy availability of credit.

The first empirical objectives of this study were to determine Generation Y students' actual credit use which includes types of credit used, sources of income, factors influencing Generation Y credit use, credit health and financial concerns. The next empirical objective was to determine Generation Y students' materialism, status consumption, social comparison, and impulsive buying tendencies and their attitude towards money and credit and credit usage intentions in the South African context. The third empirical objective was to determine whether credit usage intentions among Generation Y students are a seven-factor structure consisting of materialism, status consumption, money as a motivator, impulsive buying, social comparison, attitude towards credit and credit usage intentions. The fourth empirical objective was to test a model of the influence of materialism, status consumption, social comparison, impulsive buying, money as a motivator and attitude towards credit shape on credit usage intentions among Generation Y students in South Africa. The last empirical objective was to determine the influence gender has on materialism, status consumption, social comparison, impulsive buying, money as a motivator and attitude towards credit.

The sampling frame consisted of 26 universities in South Africa, of which four university campuses were selected. The selected university campuses included two from a traditional university, one from a university of technology and one from a comprehensive university. A convenience sample of 630 students was taken during 2017. Statistical analysis of the collected data included factor analysis, descriptive statistics, structural equation modelling and an independent samples t-test.

The study found that 71 percent of students used some form of credit, mostly NSFAS, although 73 percent claimed to be dependent on parents and family as their primary source of income. Most students were able to fulfil their financial obligations. As such, only 7 percent were struggling to keep up and 9 percent were behind on payments. Tuition and related expenses were the participants' biggest concern.

The empirically tested model indicates that materialism and status consumption tendencies influence Generation Y students' attitude towards money, which, together with impulse buying and social comparison tendencies, influences their attitude towards credit and consequent credit usage intentions.

This study contributes towards understanding the motivations of students when purchasing products on credit. This study determined why Generation Y students chose to use credit, where they obtain credit and on what they spend the available credit. In addition, the study illustrates the relationship between materialism, status consumption, social comparison, impulsive buying, money as a motivator, attitude towards credit and credit usage intentions among Generation Y students.

OPSOMMING

Sleutelwoorde: Verbruikerskrediet, Generasie Y, krediet, skuld, studentelening, finansiering, materialisme, statusverbruik, beeldbewustheid, sosiale vergelyking, impulsiewe koop, krediet bedoelings.

Deel van moderne verbruikerswese is die oorskakeling van kontant na krediet. Dit is 'n wêreldwye tendens en verbruikers spandeer meer en bespaar minder. Banke en kleinhandelaars moedig verbruikers aan om rekenings oop te maak en op krediet te koop. Studente is 'n belangrike teiken-mark as gevolg van hul toekomstige verdienstepotensiaal en baie studente het baie skuld teen die tyd dat hulle gradueer. Suid-Afrika het meer as 20 miljoen krediet-aktiewe verbruikers, waarvan ongeveer die helfte agterstallig is met hul betalings. Die Suid-Afrikaanse regering, wat die omvang van die probleem besef, het daarom die Nasionale Kredietwet (NKW) geïmplimenteer om verbruikers te beskerm. Die NKW het Suid Afrika ook in 'n mate beskerm teen die gevolge van die 2008 finansiële krisis.

Die eerste empiriese doelwit van hierdie studie was om die generasie Y-studente se werklike kredietgebruik, tipes kredietgebruik, inkomstebronne, faktore wat die generasie Y kredietgebruik, kredietgesondheid en finansiële belange beïnvloed, te bepaal. Die volgende empiriese doelwit was om die generasie Y-studente se materialisme, statusverbruik, sosiale vergelyking en impulsiewe koop tendense te bepaal, en hul houding teenoor geld en krediet en kredietgebruik bedoeling in die Suid-Afrikaanse konteks. Die derde empiriese doelwit was om vas te stel of kredietgebruik bedoeling onder generasie Y-studente 'n sewe-faktorstruktuur is wat bestaan uit materialisme, statusverbruik, geld as motiveerder, impulsiewe koop, sosiale vergelyking, houding teenoor krediet- en kredietgebruik bedoeling. Die vierde empiriese doelwit was om 'n model van die invloed van materialisme, statusverbruik, sosiale vergelyking, impulsiewe koop, geld as motiveerder en houding teenoor kredietvorm op kredietgebruik bedoeling onder generasie Y-studente in Suid-Afrika te toets. Die laaste empiriese doelwit was om die invloed wat geslag op materialisme, statusverbruik, sosiale vergelyking, impulsiewe koop, geld as motiveerder en houding teenoor krediet te bepaal.

Die steekproefraamwerk bestaan uit 26 universiteite in Suid-Afrika, waarvan vier universiteitskampusse gekies is. Die gekose universiteitskampusse sluit in twee uit 'n tradisionele universiteit, een van 'n universiteit van tegnologie en een van 'n omvattende universiteit in. 'n Gerieflikheids steekproef van 630 studente is gedurende 2017 geneem. Statistiese analise van die versamelde data sluit in faktorontleding, beskrywende statistiek, strukturele vergelyking modellering en 'n onafhanklike steekproef t-toets.

Die studie het bevind dat 71 persent van die studente een of ander vorm van krediet gebruik het, meestal NSFAS (National Student Financial Aid Scheme), hoewel 73 persent beweer het dat hulle afhanklik is van ouers en familie as hul primêre bron van inkomste. Die meeste studente kon hul finansiële verpligtinge nakom. Slegs 7 persent sukkel om tred te hou en 9 persent was agter met betalings. Onderrig- en verwante uitgawes was die grootste besorgdheid van die deelnemers.

Die empiries getoetste model dui aan dat materialisme en statusverbruikstendense invloed op die generasie Y-studente se houding teenoor geld beïnvloed, wat saam met impulskoop en sosiale vergelykingstendense hul houding teenoor krediet en gevolglike kredietgebruiks bedoelings beïnvloed.

Hierdie studie dra by tot die kennis van die motivering van studente by die aankoop van produkte op krediet. Hierdie studie het bepaal waarom generasie Y-studente gekies het om krediet te gebruik, waar hulle krediet kry en waarop hulle die beskikbare krediet spandeer. Daarbenewens illustreer die studie die verband tussen materialisme, statusverbruik, sosiale vergelyking, impulsiewe koop, geld as 'n motiveerder, houding teenoor krediet- en kredietgebruik bedoeling onder generasie Y-studente.

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LIST OF ACRONYMS

AMOS	Analysis of Moment Structures
ATM	Automatic Teller Machine
EFA	Exploratory factor analysis
FICO	Fair, Isaac and Company
FSB	Financial Services Board
HEI	Higher education institution
IT	Information technology
GDP	Gross domestic product
NCA	National Credit Act
NSFAS	National Student Financial Aid Scheme
SEM	Structural equation modelling
SMME	Small and medium-sized enterprises
SPSS	Statistical Package for the Social Science
USA	United States of America
VIF	Variance inflation factor

CHAPTER 1

INTRODUCTION AND PROBLEM STATEMENT

1

1.1 INTRODUCTION

The meaning of 'credit' is derived from the Greek word '*credo*', which translates into 'to believe' and refers to the belief of the credit giver that the credit taker will honour his or her obligations. The modern global economy, as well as the high standard of living enjoyed in many countries, is built on this belief (Beares, 2013:3; Ironfield-Smith *et al.*, 2005:133).

Credit plays a major role in stimulating the economy. It gives consumers the opportunity in funding the purchase of goods they could not ordinarily afford and contributes to the economy by increasing consumer spending. Both the global economic boom in the early 2000s and the subsequent recession have been attributed to the ease with which credit was given and the lax credit controls at the time (Stoop, 2009:365). In South Africa the increased availability of credit fuelled the extraordinary rise of the middle class and drove economic growth, which reached its peak around 2008 (Nzukuma, 2017). Unsecured lending is still increasing in South Africa, growing by 5 percent year on year by the end of April 2018, while real gross domestic product (GDP) growth is closer to 1 percent (Absa, 2018; Lamprecht, 2018).

Credit is, however, a mixed blessing to many. Many consumers spend everything they earn or even more than they earn using credit without even realising it. Obtaining more credit is often seen as equivalent to obtaining additional income without realising the future cost (Mapother, 1999:78). This is due to the abstract and unreal quality of credit transactions for many people (Roth, 2008). In 2017, almost 25 million South Africans, eight million more than the total number of employed people in South Africa, were credit-active and seven out of ten middle-class consumers claimed that they are financially distressed (Ferreira, 2017; Anon., 2017c). Research by the Momentum financial group had similar findings and indicated that in 2018, 73.5 percent of South African households were experiencing financial difficulty (Smith, 2018b). The household debt to disposable

income ratio was at 71.4 percent at the end of 2017 and total household debt amounted to R1.69-trillion (Ferreira, 2017). This high debt to disposable income often forces consumers to take out new loans to repay old loans, which further aggravates the problem of high consumer debt and which causes many people to become over-indebted. Consumers become stuck in a situation where they are unable to repay their loans, while interest charged on those new loans increase their obligations (Stoop, 2009:368). When a consumer becomes unable to repay loans, credit providers can obtain court judgements against them for the outstanding amount. The judgement is recorded by credit agencies and is referred to as blacklisting (Neethling, 2006:376). The effects of being blacklisted can be severe and may include not being able to obtain further finance, higher interests rates, difficulty in renting property and higher insurance premiums. Moreover, employers may be hesitant to hire a person who is blacklisted (Irby, 2014).

Several factors must be considered when examining the credit woes of South Africans. External factors such as past discrimination based on race and gender led to a significant disparity among South Africans. Discrimination was not limited to the public sector but was also practised by the private sector and the apartheid system “supported, encouraged, and even demanded discrimination and unfair treatment of customers by business entities”. Consequently, many people lack knowledge and experience concerning credit, leaving them vulnerable to exploitation and unethical marketing practices (Rampersad & Reddy, 2012:7407). This led to many problems, including the emergence of the micro lending industry, which often lends money at extravagant interest rates. In an effort to mitigate the possible consequences of over-indebtedness and to protect consumers from such unethical practices, the government enacted the National Credit Act (NCA) (34 of 2005). The NCA focuses on a number of problems, including the high cost of credit, lack of access to credit, vulnerable consumers being taken advantage of, reckless granting of credit and unethical debt collection (Kelly-Louw, 2008:200).

The literature suggests several factors are likely to impact on credit usage intentions. The first factor is materialism, which is commonly defined as “the importance a consumer attaches to worldly possessions” (Belk, 1984: 291). Previous studies have found that materialism is associated with a positive attitude towards debt and may be used as a variable in predicting a consumer’s propensity for incurring debt and willingness to take

on higher levels of debt (Donnelly *et al.*, 2013:122; Ponchio & Aranha, 2008:21; Fitzmaurice & Comegys, 2006:298). This is especially relevant to this study since similar studies have found that consumers in developing countries tend to be more materialistic and a comparative study found that young adults in South Africa are more materialistic than those from the selected European countries (Duh *et al.*, 2014:251; Postel, 2008).

Another factor is status consumption, which is “the motivational process by which individuals strive to improve their social standing through the conspicuous consumption of consumer products that confer and symbolise status both for the individual and surrounding significant others” (Eastman *et al.*, 1999:93). Social inequality often pushes poorer households to engage in status consumption and this leads consumers, who can ill afford it, to incur debt to finance a lifestyle that they believe will command the respect of their community and peers (Ordabayeva & Chandon, 2010:28; Chipp *et al.*, 2011:130).

Social comparison is also thought to influence credit usage and refers to “a tendency to compare one’s own status to that of others in determining whether or not one has enough” (Norvilitis & Mao, 2013:391). Life satisfaction decreases the more often people make upward (unfavourable) comparisons, regardless if they earn high levels of income themselves (Peng, 2007:224). This leads some consumers to fall into an aspirations trap where larger and more frequent purchases become necessary to satisfy their competitive appetite (Nagpaul & Pang, 2017a:12). Social comparison has been shown to normalise debt; that is, people in debt are more likely to consider debt as normal and widespread among their peers and, therefore, socially acceptable (Pattarin & Cosma, 2012:115).

Another factor believed to have an influence on credit usage is the concept of impulsive buying, which is defined as “a consumer’s tendency to buy spontaneously, unreflectively, immediately and kinetically” (Rook & Fisher, 1995:306). Impulsive buying is associated with the desire for immediate gratification, risk-seeking and self-centeredness, all of which are linked to irresponsible credit behaviour (Norvilitis, 2014:635; Adams & Moore, 2007:101). Materialism is an important antecedent of impulsive buying and affects how much people will spend on impulsive purchases and how often people engage in impulsive buying (Richins, 2013:3).

Naturally, a person's attitude towards money itself has an influence on credit usage. Money as a motivating force refers to the effect money has on people's behaviour. Money-based rewards are considered a powerful external motivator for some depending on a person's attitude towards money (Monteiro *et al.*, 2014:14). Attitudes towards money may be formed through education, experience and habits. Attitudes will determine how consumers perceive, value and treat money (Engelberg & Sjoberg, 2006:2027). Emotional versus logical attitudes towards money and spending will determine spending patterns and credit use (Adams & Moore, 2007:101). Studies have found that people who consider money as more important are also more likely to accumulate debt (Harnish *et al.*, 2018:190; Robb & Sharpe, 2009:26; Phau & Woo, 2008:540).

Consumers are not always rational and pragmatic when using credit, as emotions and attitude towards credit also play an important role. This includes emotional factors such as status and prestige considerations, financial attitudes such as unrealistic optimism, level of financial knowledge, debt tolerance and psychological constructs like the locus of control and cognitive dissonance (Kennedy, 2013:7; Kim & Jang, 2013:39; Finn, 1992:658; Forman, 1987:2028). Attitude will influence the number of credit accounts people hold, their frequency of credit use and their repayment decisions (McHugh & Ranyard, 2012, Xiao *et al.*, 1997:32). These attitudes towards money and debt are shaped during childhood and lifestyle, upbringing and family structure all play a role (Rindfleisch *et al.*, 1997:320; Kirkcaldy & Furnham, 1993:1079).

The youth segment represents a salient current and future target market across a range of industry sectors, including credit providers. In 2018, the youth segment was referred to as Generation Y (Duh, 2014:975). According to Markert (2004:21), whereas the previous generation, Generation X, includes people born between 1966 and 1985, Generation Y refers to individuals born between 1986 and 2005. Working within the age parameters of the mid-year report by Statistics South Africa (2018), Generation Y made up approximately 35 percent of the South African population in 2018. University students often have a higher social status within a community and are often of particular interest to marketers (Noble *et al.*, 2009:617).

Indeed, the student market is often seen as one of the most coveted consumer segments due to the market's size, students' role as early-adopters and trendsetters, the lifelong

brand loyalties acquired during these formative years and their influence over parental purchases (Noble *et al.*, 2009:617). Students are also an important segment for advertising and marketing by credit providers, although credit use among students is lower than among working consumers (Anon., 2013). This is because a graduate qualification means that students have a higher than average future earning potential, which makes them a desirable market segment. This leads to them being targeted by credit providers looking to build brand loyalty early on (Nga *et al.*, 2011:245; Mansfield & Warwick, 2000:617). This is also true in South Africa where banks are increasingly targeting students, not only with student loans but also by offering student-specific credit cards. A recent study among students found that some banks were so successful in marketing to students that they managed to increase credit card usage among students from 9.5 percent in 2010 to 45 percent in 2012 in some areas. More recent research estimates that 29 percent of students used credit cards in 2017. Although credit card use among students may be widespread, the value remains low and the 18- to 25-year old age group only hold one percent of the total credit card debt compared to the next age group, from 26 to 35, who hold 40 percent and are the most heavily indebted group. Banks are not the only organisations targeting students, with 57 percent of students reported that they use store credit. Not all students are equipped to handle this responsibility and research has found that up to 50 percent of credit-active 18 to 26 year-old consumers are battling to pay their debts (Student Village, 2017; Goko, 2013).

There are also several reasons for focusing on the university student portion of Generation Y, including:

- Students tend to be homogenous with regard to income and necessary expenditures, which allows non-economic trends to be seen more readily.
- Students have a high exposure to debt such as student loans.
- Newer generations are more comfortable with credit and being in debt.
- Students are willing to take on debt on the premise of a higher future potential income.
- Debt influences career choices among students.

- Young adults' debt is an important issue as they make relatively high use of credit (Davies & Lea, 1995:665).

1.2 PROBLEM STATEMENT

Globally, students have become an important market segment for both retailers and credit providers since they are increasingly buying on credit. However, financial problems are one of the primary reasons for student attrition and many students drop out of tertiary education to avoid getting deeper into debt (Sagenmüller, 2018; Martin, 2018). This then makes it important to determine how students' attitudes and values will impact their current and future credit use. Chien and Devaney (2001:162) indicate that research has shown that the growth in credit use since the 1980s is due, in part, to a change in attitude toward credit and that consumers are more willing to use credit to finance current consumption. Coupled with greater accessibility of credit and more knowledge about the benefits and risks involved in using credit this may help explain the increased acceptability of credit.

The literature indicates that the respective generations are quite different and that these differences include their attitudes toward credit (Eisner 2005:12). Starting in the 1990s, it became evident that the way people viewed debt had changed and that credit had become part of everyday financial life for younger generations, which raised concerns about the comfort level that students display in dealing with credit (Pinto *et al.*, 2001:49; Davies & Lea, 1995:663). Considering the important role that credit plays in the South African economy, as well as the fact that almost three quarters of credit-active consumers struggle to keep up with their obligations, there is a need to find ways to encourage people towards becoming more responsible with their credit decisions (Smith, 2018a; Anon., 2013), particularly as it pertains to today's youth – Generation Y. To do so, the problem will first have to be studied and it will have to be determined why individuals buy on credit and their attitude towards credit.

Financial literacy leads to better financial decision-making and financial illiteracy has been blamed for harmful financial decisions and over-indebtedness (Shim *et al.*, 2010:1459). However, research shows that the emotional component of decision-making also plays an important role (Shapiro & Burchell, 2012:2). A person's attitude towards debt is

influenced by several internal emotional factors, which also determine a person's likelihood of acquiring credit. These factors have been the focus of research for the last 30 years. Past research has focused heavily on materialism or the importance of material possessions (Belk, 1984:291). People who show more materialistic tendencies tend to spend more money and are more likely to incur debt (Fitzmaurice & Comegys, 2006:298). Furthermore, according to Watson (1998:203), people who are more inclined towards being materialistic tend to have a more positive attitude towards debt. Materialism can thus be used to predict the propensity towards debt (Ponchio & Aranha; 2008:21). Research also indicates that people in developing countries are more materialistic than people in developed countries (Jacobs & Smith, 2010:15). Nga *et al.* (2011:245) used image consciousness, materialism and compulsive spending to predict credit card behaviour among the youth and found a significant positive relationship between image consciousness and materialism and between materialism and compulsive spending but not that compulsive spending acted as a mediator for credit card use. Yamauchi and Templer (1982) found that consumers who use more credit tend to view money as a source of prestige or power, have greater anxiety over money and are less concerned with retaining money (Tokunaga, 1993:314). Xiao *et al.* (1995:155) later developed a test to determine credit card attitudes among students with the three dimensions of behavioural, affective and cognitive aspects. They found that more positive attitudes towards credit are determined by the affective and cognitive dimensions and demographics also played a role in shaping attitudes.

Debt is arguably one of the biggest problems facing South African consumers. Almost 44 percent of South Africans are in debt, 70 percent of middle class consumers claim that they are financially distressed and approximately 14 000 consumers apply for debt reviews each month (National Credit Regulator, 2017; Ferreira, 2017; Anon., 2017c). Although financial literacy has been regarded by some as the solution to the current debt crisis, research points to the fact that the emotional component of financial decision-making also plays an important role and needs to be considered when attempting to understand the factors that push consumers to finance their purchases and lifestyles through credit use (Shapiro & Burchell, 2012:2; Shim *et al.*, 2010:1459). Some researchers have pointed out that the biggest distinction between Generation Y and previous generations may be their attitude towards money (Duh, 2014:974). A closer

examination of the attitudes influencing credit usage intentions among Generation Y students is thus warranted and will be used to build an understanding of the credit problems currently prevalent in the South African economy.

1.3 STUDY OBJECTIVES

The following objectives have been formulated for the study:

1.3.1 Primary objectives

The primary objective of this study was to determine whether the psychological tendencies identified from the literature influenced the participants' attitude towards credit and whether attitude towards credit acted as an antecedent to credit usage intentions. From the available literature, the following predictors were identified, namely materialism, status consumption, impulsive buying, social comparison, money as a motivator and credit attitude.

1.3.2 Theoretical objectives

In order to achieve the primary objective, the following theoretical objectives were formulated for the study:

- 1.3.2.1 Discuss the historic foundation of modern consumer credit.
- 1.3.2.2 Examine the global growth of consumer credit and how it has shaped the modern market.
- 1.3.2.3 Review the literature on the importance of credit to the South African economy.
- 1.3.2.4 Discuss the relationship university students have with credit.
- 1.3.2.5 Determine the factors that influence attitude towards credit according to the available literature.
- 1.3.2.6 Conduct a literature review on the characteristics of Generation Y consumers relevant to their credit behaviour.

1.3.2.7 Propose a model of the influence of materialism, status consumption, social comparison, impulsive buying, money as a motivator and attitude towards credit on credit usage intentions among Generation Y students.

1.3.3 Empirical objectives

In accordance with the primary objective of the study, the following empirical objectives were formulated:

1.3.3.1 Determine Generation Y students' actual credit use, including their sources of income and credit types, their credit purchases, debt management, reasons for credit use, credit applications and financial concerns in the South African context.

1.3.3.2 Determine Generation Y students' materialism, status consumption, social comparison and impulsive buying tendencies and their attitude towards money and credit and credit usage intentions in the South African context.

1.3.3.3 Determine whether credit usage intentions among Generation Y students are a seven-factor structure consisting of materialism, status consumption, money as a motivator, impulsive buying, social comparison, attitude towards credit and credit usage intentions.

1.3.3.4 Empirically test a model of the influence of materialism, status consumption, social comparison, impulsive buying, money as a motivator and attitude towards credit on credit usage intentions among Generation Y students in South Africa.

1.3.3.5 Determine the influence gender differences have on Generation Y students' attitude towards credit and credit usage intentions.

1.3.4 Hypotheses

A hypothesis is an unproven statement about a phenomenon that is of interest to the researcher and may be in the form of a tentative statement about the relationship between variables. In the formulation of a hypothesis, the null hypothesis states that there is no

effect while the alternative hypothesis is one in which some effect is expected. The null hypothesis is tested and may be rejected based on evidence in which case the alternative is accepted (Malhotra 2018:50; 446).

The following hypotheses were formulated and tested to achieve the empirical research objectives:

Ho1: Determinants of credit usage intentions is not a seven-factor structure consisting of materialism, status consumption, money as a motivator, impulsive buying, social comparison, attitude towards credit and credit usage intentions.

Ha1: Determinants of credit usage intentions is a seven-factor structure consisting of materialism, status consumption, money as a motivator, impulsive buying, social comparison, attitude towards credit and credit usage intentions.

Ho2: Materialism does not have a direct significant positive influence on Generation Y students' attitude towards credit.

Ha2: Materialism does have a direct significant positive influence on Generation Y students' attitude towards credit.

Ho3: Status consumption does not have a direct significant positive influence on Generation Y students' attitude towards credit.

Ha3: Status consumption does have a direct significant positive influence on Generation Y students' attitude towards credit.

Ho4: Money as a motivator does not have a direct significant positive influence on Generation Y students' attitude towards credit.

Ha4: Money as a motivator does have a direct significant positive influence on Generation Y students' attitude towards credit.

Ho5: Impulsive buying does not have a direct significant positive influence on Generation Y students' attitude towards credit.

Ha5: Impulsive buying does have a direct significant positive influence on Generation Y students' attitude towards credit.

Ho6: Social comparison does not have a direct significant positive influence on Generation Y students' attitude towards credit.

Ha6: Social comparison does have a direct significant positive influence on Generation Y students' attitude towards credit.

Ho7: Attitude towards credit does not have a direct significant positive influence on Generation Y students' credit usage intentions.

Ha7: Attitude towards credit does have a direct significant positive influence on Generation Y students' credit usage intentions.

Ho8: Male and female Generation Y students do not differ in their attitude towards credit.

Ha8: Male and female Generation Y students do differ in their attitude towards credit.

Ho9: Male and female Generation Y students do not differ in their credit usage intentions.

Ha9: Male and female Generation Y students do differ in their credit usage intentions.

1.4 Research design and methodology

This study comprised a literature review and an empirical study. Quantitative research, using the survey method, was used for the empirical portion of the study, which focused on measuring attitudes. Consequently, a descriptive research design with a single cross-

sectional sample was followed using a structured questionnaire containing close-ended questions on a six-point Likert type scale.

1.4.1 Literature Review

A review was done of the South African and international literature on the importance of consumer credit to the economy, student debt, the types of credit available, regulation of credit providers as well as the environmental factors that shape Generation Y consumers and their attitude towards credit. The different constructs of materialism, status consumption, social comparison, impulsive buying, money as a motivator and attitude towards credit were also examined. This literature was obtained from secondary data sources, including the Internet, journal articles, academic textbooks, conference papers, business articles, online academic databases, newspaper articles and magazine articles.

1.4.2 Empirical study

The empirical part of this study followed a descriptive research design using a single cross-sectional survey for data collection comprising the following methodology dimensions:

1.4.2.1 Target population

The target population refers to a collection of elements or objects that possess the information sought (Malhotra, 2018:331), which, in the case of this study, included Generation Y students enrolled at South African Higher Education Institutions (HEIs). Although Generation Y includes people born between 1986 and 2005 (Markert, 2004:21), this study focused on the university student segment of Generation Y. Thus the target population is specified as students between 18- and 26-year registered at a public South African HEI's in 2017. An age range of between 18 and 26 was chosen because research has found that most students need at least two additional years to complete a degree, five years for a three-year degree and six years for a four-year degree (Van Broekhuizen *et al.*, 2016:4; 6).

1.4.2.2 Sampling frame

The sampling frame comprised the 26 registered South African public HEIs. A non-probability judgment sample of four HEI campuses was selected from the sampling frame; that is, two from a traditional university, one from a university of technology and one from a comprehensive university.

1.4.2.3 Sample method

A non-probability convenience sample of full-time undergraduate Generation Y students between the ages of 18 and 26 was used in this study, following a single cross-sectional design, in which information is obtained from a single sample once (Malhotra, 2018:71). Being cognisant of the convenience sampling technique, questions concerning the participants' demographic information were included in the survey questionnaire, such as home language and province of origin, in an effort to ensure a representative sample was taken.

1.4.2.4 Sample size

The sample size is the total number of elements from the target population included in the research study (Cant *et al.*, 2008:136). In this study, 700 full-time Generation Y students between the ages of 18 and 26, split between four university campuses made up the sample. From this sample, 630 completed questionnaires were received back. Therefore, the actual sample size used in the study was 630. This is in accordance with similar studies (Bevan-Dye & Ukupojivi, 2016:118; Mofokeng *et al.*, 2015:135; Synodinos *et al.*, 2013:19). Wolf *et al.* (2013:914) propose that the minimum number of respondents to be used in a covariance-based structural equation model is 200 and that reliable observations are more likely when there is a 10:1 ratio of cases to free parameters. Hair *et al.* (2010:662) propose that when seven or more constructs are used, the sample size should be between 300 and 500. A planned sample size of 700 and the actual sample size of 630 full-time Generation Y students were deemed satisfactory for this study. Attempts were made to split the sample between the four selected campuses and obtain at least 100 responses from each, thereby ensuring that the results were representative and not skewed in favour of one campus.

1.4.2.5 Measuring instrument and data collection method

A standardised, self-administered questionnaire was used to collect data. A cover letter provided an introduction, explained the relevance and nature of the study as well as provided contact details. The questions were divided into three sections. Section A contained questions to determine the demographic composition of the sample, Section B determined actual credit use and Section C contained questions on the various selected constructs taken from previously validated scales. Section C used a six-point Likert type scale and measured materialism, status consumption, social comparison, impulsive buying, money as a motivator, attitude towards credit and credit intentions. Validated scales from Richins and Dawson (1992), Eastman and Liu (2012), Monteiro *et al.* (2015), Rook and Fisher (1995), Norvilitis and Mao (2013) and Davies and Lea (1995) were adapted for this study.

The questionnaire was piloted once on 59 participants that did not form part of the sampling frame to ascertain its reliability.

Lecturers were contacted on each of the campuses and requested to assist in distributing and collecting the questionnaires. The relevance of the study and the voluntary and anonymous nature of the questionnaire were explained to students. Subsequently, the questionnaires were distributed and collected after completion.

1.4.2.6 Statistical analysis

The captured data were analysed using the Statistical Packages for Social Sciences (SPSS) and Analysis of Moment Structures (AMOS), Versions 25.0 for Windows. The following statistical methods were used on the empirical data sets:

- Frequency analysis
- Exploratory factor analysis
- Descriptive analysis
- Collinearity diagnostics
- Nomological validity
- Structural equation modelling

- Independent samples t-test

1.5 ETHICAL CONSIDERATIONS

The research study complies with the ethical standards of academic research, which among other things, protect the identities and interests of participants. Participation in the survey was voluntary and no participant was coerced to respond.

The research proposal including an overview of the research methodology followed and the questionnaire was submitted to and accepted by the North-West University's Ethics Committee. The questionnaire met the Committee's standards and received the following ethical clearance number: **ECONIT-2016-113**.

1.6 THEORETICAL FRAMEWORK

The theoretical framework for this study builds on the work of previous social scientists that propose that materialism, status consumption, impulsive buying, social comparison, money as a motivator and a positive attitude towards credit will lead to an increased intention to use credit (Nga *et al.*, 2011:245; Ponchio & Aranha, 2008:21; Fitzmaurice & Comegys, 2006:298; Watson, 1998:203).

1.7 DEMARCATION OF THE STUDY

This study was conducted among Generation Y students between the ages of 18 and 26 years, registered at South African public HEIs in 2017. This study considered four public HEI campuses located in South Africa. The four campuses chosen included two traditional university campuses, one comprehensive university campus and one university of technology campus.

1.8 CHAPTER CLASSIFICATION

Chapter 1: Introduction and background to the study

This chapter encompasses the introduction and background of the research study. It includes an outline of the problem, the research objectives, including the primary, theoretical and empirical objectives and the research methodology that was used in reaching the empirical objectives.

Chapter 2: Students and credit

This chapter contains a detailed discussion on the history and function of credit and the contribution of credit to the economy. The chapter also discusses how the negative association with credit has changed to the point where consumer credit is now considered essential to the modern economy. Chapter 2 also includes an examination of the sources of consumer credit in South Africa, over-indebtedness and how the law is used to regulate credit providers. Lastly, it examines students' relationship with credit and student debt.

Chapter 3: Attitudes that influence credit use

This chapter examines the international and local literature available on the environment that shaped Generation Y consumers, especially as it applies to South African Generation Y students. Next, it examines the attitudes that are relevant to and influence consumer credit use. The relevant literature on the influence of materialism, status consumption, social comparison, impulsive buying, money as a motivator, attitude towards credit and credit usage intentions are discussed. Chapter 3 also includes a proposed model based on available literature on the relationship between the attitudes discussed and credit intentions among Generation Y students.

Chapter 4: Research design and methodology

This chapter outlines the marketing research process and discusses the questionnaire design, sampling procedure and data collection method. The data analysis and statistical techniques that were used are also discussed in this chapter.

Chapter 5: Results and findings

This chapter includes the results from the pilot test and the main study. The demographics of the participants are discussed to show that it is a relatively representative sample. Then the actual credit use among the participants is examined. Next follows the exploratory factor analysis and the results of the structural equation modelling. It ends with a description of the results from the independent samples t-test.

Chapter 6: Conclusions and recommendations

Chapter 6 provides an overview of the study and the results from the empirical research. Recommendations emanating from the study are made along with suggestions for further research based on the limitations of this study.

1.9 GENERAL

- Annexures are at the back of the thesis.
- Tables and figures are placed on the pertinent pages in the thesis.
- Where no source reference appears for figures and tables, it denotes own research.
- Referencing is 2012 NWU Harvard style

1.10 CONCLUSION

This chapter contains the background to the study, the problem statement, study objectives and research methodology, together with an outline of the chapters that make up this thesis.

In the following chapter, a review of the literature on consumer credit with a focus on Generation Y student credit use is provided.

CHAPTER 2

STUDENTS AND CREDIT

2

2.1 INTRODUCTION

Finance has at its core two functions, namely allowing a person to store surplus income for the future and allowing borrowers access to future earnings today (Gobat, 2012). It is often younger consumers borrowing to finance assets and maintain their lifestyle, while older consumers are saving for retirement after repaying debt. The rationale is found in the life cycle theory, which provides a framework for analysing the use of consumer credit. The life cycle theory holds that “consumption and savings decisions of households at each point in time reflect a more or less conscious attempt at achieving the preferred distribution of consumption over the life cycle, subject to constraints imposed by resources accruing to the household over its lifetime”. In applying this to students, the theory is that they grow up accustomed to a certain lifestyle provided by their parents, which they expect to maintain after their studies are complete but as students are unable to sustain while studying. They expect higher future earning and believe the lower income levels they are experiencing are temporary. They then accept a level of debt that they see as necessary to maintain their spending, which they plan to repay with their higher future income. This increases their debt tolerance and fosters a positive attitude towards debt. Therefore, expenditure and credit use may sometimes rather be a function of expected future income and not proportional to the limits of current income. This phenomenon can be seen in the higher debt levels of younger consumers and lower debt, together with saving and paid assets in older consumers (Hurwitz & Luiz, 2007:110; 130; Davies & Lea, 1995:663). This is not a linear effect and often consumers will borrow in times of low income to smooth consumption with the expectation to pay when their income increases (Kumar, 2016:200). This chapter examines how consumers finance purchases through lending, with a focus on student credit use.

The term consumer credit is used to describe several types of credit used by individuals that are not collateralised, or secured, by fixed assets or financial assets such as stocks and bonds and not used for business purposes. This includes instalment credit such as

vehicle finance and revolving credit such as credit cards (Durkin *et al.*, 2014). On 3 May 2016, the total amount of global household debt stood at 42.3 trillion United States Dollars (US\$) with an annual growth of 3.3 percent. This is approximately US\$6 000 for every man, woman and child on earth. Of this, 78 percent are home mortgages, 18 percent non-credit card consumer debt and 4 percent credit card balances. While the United States is still the world's largest consumer lending market, consumer debt is also rapidly growing in countries like China where consumer debt is growing at 18.7 percent a year (Finaccord, 2016).

Credit use is, however, not a new phenomenon. Credit use goes back thousands of years, although there are three important events that stand out. The first is the Law of Hammurabi, created in 1754 BC and one of the oldest deciphered writings of significant length in the world that, among other things, regulated credit and interest rates (Armstrong, 2018). The second is the foundation of the modern banking system in the middle ages by pawnbrokers, moneychangers and merchant bankers (Anon., 2008). The third is the industrial revolution during which increased wages led to increased demand for consumer goods and credit, as well as a demand for capital to invest in production (Ventura & Voth, 2016:26; Coggan, 2012). The history of consumer credit is discussed shortly in Section 2.2.

For many centuries borrowing money was seen as foolish and interest-bearing loans was even forbidden by the Catholic Church (Munro, 2003:507). This has changed and today credit is seen as a boon, contributing to the social well-being of consumers and essential to economic growth (Kostov *et al.*, 2015:34; Ironfield-Smith *et al.*, 2005:133). The growth of consumer credit and the contribution to the modern economy is discussed in Section 2.3 and 2.4. Access to consumer credit has also improved as technology improved and consumers have access to financial services anywhere on earth (Narteh, 2012:2). How technology has influenced credit providers and access to credit is discussed in Section 2.5. South Africans, in particular, have embraced credit and consequently, become one of the most indebted countries, with 86 percent of South Africans having some kind of debt (Ferreira, 2017; Thomas, 2015). Credit use in South Africa is discussed in Section 2.6. There are various types of credit and sources available to consumers. Credit is usually divided into secured and unsecured credit and instalment or non-instalment credit.

The different types of credit, the sources as well as the actual credit use by South Africans are discussed in Section 2.7. Many South Africans have become over-indebted and the consequences as well as government measures to regulate credit, mainly through the National Credit Act (NCA), are discussed in Section 2.8.

Students borrow money not only to pay for their tuition fees but also food, rent and luxuries. Student debt is a controversial subject, not only in South Africa but globally and many other countries have experienced student protests similar to the #Feesmustfall movement in South Africa (Cele, 2016; Pretorius, 2016; Mulhere, 2015; McMahon, 2012). Students, money and student debt is discussed in Section 2.9.

Throughout Chapter 2, there is evidence of a global trend towards borrowing instead of saving. That being said, individual attitudes towards money and credit also plays a role in determining a consumers' willingness to use credit and how deep they are willing to go into debt (Dunn & Mirzaie, 2015:201; Liao & Liu, 2012:1263). Section 2.10 deals with some of the non-economic and individual factors that influence credit use.

2.2 HISTORIC USE OF CREDIT

Although some may think of credit as a modern concept, it has actually been around for thousands of years. Some economists have argued that the emergence of money is due to the inefficiencies of barter economies but there is very little historical evidence that shows that this is how money actually came about. However, research does show that prehistoric societies and early historic economies used credit and centralised redistribution in allocating resources. Credit is more efficient than barter when trading partners know each other and currency either does not exist or is in low supply (Baker, 2014:1).

The earliest codification of credit laws is contained in the Code of Hammurabi, written almost 4 000 years ago. In it, King Hammurabi capped the interest rates on silver at 20 percent and required the terms of a loan to be captured in writing. The first credit crisis occurred in 594 B.C. and almost caused open rebellion in Athens, Greece. This prompted the laws regulating credit written by Hammurabi to be reformed and people sold into slavery to repay debt to be freed (Armstrong, 2018).

Aristotle notably said,

The most hated sort [of money-making] and with the greatest reason, is usury, which makes a gain out of money itself, and not from the natural use of it. For money was intended to be used in exchange, but not to increase at interest. And this term usury which means the birth of money from money, is applied to the breeding of money because the offspring resembles the parent. Whereof of all modes of making money this is the most unnatural (Munro, 2003:508).

The Roman Empire further reduced the interest rate during the reign of Augustus and it sank as low as 4 percent, although the upper limit was set at 12.5 percent (Armstrong, 2018). The Romans also used a credit system in which *Nomina* or bonds entered into an account book could be transferred and traded for assets such as land (Del Negro & Tao, 2013).

Modern banking can trace its origins to the Middle Ages and to the services of the pawnbrokers, moneychangers and merchant bankers. Their functions ranged from the conversion of coins to holding and transferring large sums of money (Anon., 2008). Transferring large sums of money were important because metal coins were heavy and difficult to transport when large purchases needed to be made. It was much easier to deposit money and then provide the seller with a cheque with which the seller could later claim the deposit. This network later expanded to such a degree that a person could deposit money in one city and then claim it from a banker in the next. As demand for their services increased, they also started granting loans to merchants and lords (Brittain, 2014). The Catholic Church initially banned Christians from engaging in usury, charging interest on loans and medieval loan contracts often omitted any mention of interest (Munro, 2003:507). Student loans also started in the middle ages, going as far back as the 11th century and perhaps even earlier, with the earliest documented student loan system founded in 1240 by Robert Grosseteste, the Bishop of Lincoln at Oxford University (Adams, 2016).

Credit helped England industrialise and thereby ushering in the industrial revolution (Ventura & Voth, 2016:26). Not only did it allow people to invest in new machinery and thereby increase outputs, credit also allowed workers to buy products they could not

afford upfront thus increasing demand for the products produced (Coggan, 2012). In Europe, instalment purchases were also popular for products such as furniture and large department stores called credit houses sold all types of goods to urban, working class customers on credit. In the 19th century America, this new form of consumer credit was pioneered by IM Singer & Co when they established a sophisticated agent structure that enabled customers to purchase its products through convenient, reliable instalment plans. Another form of credit that was popular in America was catalogue sales with instalment payments. Credit became so popular that several countries saw the need to start regulating the practice through legislation at the start of the 20th century (Logemann, 2011:532).

Post World War 2, the West experienced another boom in consumer spending fuelled by consumer credit. Many researchers believe that America and their 'pursuit of happiness' was one of the prime drivers of this new consumer credit-driven economy (Logemann, 2011:530). By the 1970s, half of Americans were using instalment credit to fund purchases compared to 10 percent of consumers in other industrialised nations, such as Germany. This mass consumption or consumerism due to easy access to credit was seen by the United States of America (USA) government as a viable way of expanding purchasing power as well as stimulating economic growth through creating demand. However, many people in other countries decried American consumerism and saw it as a threat to traditional values (Logemann, 2008:525; 542). Notwithstanding this, any efforts to stop the credit train were in vain and today debt and consumerism is a global phenomenon. The Victorian virtues of 'neither a lender nor a borrower be' has been replaced by the notion that happiness depends on material possession made accessible through easy credit (Manktelow, 2011:259). The vital role of credit in the modern economy, as well as current credit use, will be discussed in the remainder of this chapter.

2.3 PRESENT PERCEPTIONS OF CREDIT AND THE RESULTING GROWTH IN CREDIT USE

While the prevailing wisdom for many generations was that borrowing and debt were to be avoided, it gradually changed to a point where it is seen as beneficial, making a useful contribution to the living standard and social well-being of consumers (Ironfield-Smith *et al.*, 2005:133). Indeed, the high standard of living in Western societies is often attributed

to the widespread availability of credit (Beares, 2013:3). It is not only the West that has seen consumer debt growing; China experienced a consumer credit explosion with consumer credit increasing 373-fold from 1997 to 2010 and though this may be an extreme example, it is by no means an isolated case (Liao & Liu, 2012:1263).

According to Jacobs and Smith (2010:11), this is also true in South Africa where a culture of consumption has developed that has led to increased spending and higher levels of indebtedness. There are several factors contributing to this growth but the increased availability of credit is one of the main drivers. The advent of democracy has increased access to financial services to a previously marginalised part of the population (Hurwitz & Luiz, 2007:108). Indeed, a large part of the growth in credit consumption can be attributed to debt being incurred by lower income earners, according to economist Mike Schussler (2011). Therefore, the banking sector as a credit provider, along with capital inflows has become a conduit for economic growth through the creation of local credit and increased demand (Nzukuma, 2017; Kaminsky & Reinhart, 1999:473).

However, excessive capital inflows can also be detrimental to the economy by swamping the market with excessive credit, which, in turn, may lead to a consumption boom and asset price bubbles. Rapid monetary expansion can lead to inflation, a widening current account and appreciation of the exchange rate (Gossel & Biekpe, 2012:923). Easy availability of credit can also have other severely negative consequences. The 2007–2008 financial crisis, now called ‘The Great Recession’, is considered by many economists to be the worst financial crisis since the great depression of the 1930s (Weinberg, 2013; Pendery, 2009).

The cause of the financial crisis is complex and consisted of an interplay of policies that encouraged private home ownership, easier access to loans, overvaluation of bundled subprime mortgages and questionable trading practices. Furthermore, compensation structures that reward short-term deals flow over long-term value creation and insufficient capital holdings by banks to cover the financial commitments they were making made a financial crisis all but inevitable (Keller & Strocker, 2014; Simkovic, 2009:253; Ivry 2008). According to The Economist (2013), the crisis started with the collapse of Lehman Brothers, which led to the total collapse of large financial institutions, necessitated the bailout of banks by national governments, caused downturns in stock markets around the

world and led to the worst recession in 80 years. The recession, in turn, led to the failure of businesses, a decline in consumer wealth, rising unemployment and a downturn in the global economy, which contributed to the European sovereign-debt crisis that saw several European governments in need of financial assistance from the European Union (Williams, 2012; Baily & Elloitt, 2009).

Although some countries like the USA and China managed to drag themselves out of the recession, managing 12 and 65 percent total growth respectively since then, other countries like Italy and Greece still have not recovered and their GDP has declined by 6 and 24 percent respectively of their prerecession levels (Arias & Yen, 2015). The credit ratings of several major countries such as Germany, China and Russia were downgraded, while South Africa's credit rating remained unchanged due in part to the NCA, which set stricter requirements for consumers to access credit in a bid to curb reckless spending and over-indebtedness (Marais, 2009; Ntingi, 2008).

South Africa did not emerge unscathed; however, output in the mining sector shrank by 33 percent and the manufacturing sector shrank by 22 percent in the final quarter of 2008, the biggest decreases on record. Consumer spending shrank by almost 5 percent, there was a 47 percent rise in company failures in the first four months of 2009 and household debt rose to 80 percent of disposable income from around 50 percent in 2003 (Marais, 2009). The world global recession of 2007-2008 also hit consumers who were forced to reassess their finances and limit any new credit spending (Summers & Kroes, 2009:1).

This does not mean that the negative consequence of irresponsible credit use outweighs the positive contribution of credit to the modern economy. According to Cecchetti *et al.* (2011:1), finance has become one of the building blocks of modern societies and access to credit improves welfare and enhances growth although excessive levels of credit are to be guarded against and may drag down growth as proven by the Great Recession.

2.4 CREDIT AND PROSPERITY

The number of people living in extreme poverty fell by 1.1 billion between 1990 and 2013 but millions of people are still living beneath the poverty line (Bagri, 2016). Developing countries face several serious challenges that include unemployment, sub-standard education, limited access to infrastructure and corruption (Mobius, 2017).

Access to credit can play a role in solving some of these problems. Although there is no consensus on the finance-growth relationship, it is generally accepted that financial systems and financial development are important for facilitating and maintaining economic growth (Kostov *et al.*, 2015:34). Research suggests that the availability of credit has a positive impact on both poverty alleviation and inequality (Cecchetti *et al.*, 2011:1).

Unequal access to finance is generally accepted as generating persistent income inequality and slower economic growth and can discourage potential entrepreneurs who cannot gain access to credit (Seven & Coskun, 2016:34-35). Access to financial institutions, such as banks and micro financiers providing credit, plays an important part in development and poverty alleviation (Donou-Adonsou & Sylwester, 2016:89). Bursaries and loans can help students gain access to a quality education, while access to credit is a crucial element to the start-up and consequent performance of any enterprise (Ahmad & Arif, 2015:635; Marlow & Patton, 2005:717; St. John *et al.*, 2001:414).

Microfinance also helps poor households meet basic needs and protect against risks, improves welfare and empowers women through facilitating economic participation (AloMadulid, 2018:28). Microcredit (discussed in Section 2.7.3) is defined as small loans to poor people, which assist in the development of small-scale businesses to help people escape from poverty. Microfinance, in contrast, includes a wider array of financial services, including savings and deposit services, payments and transfer services, credit and insurance products (Murisa & Chikweche, 2013:2).

In addition to the problems facing developing countries, South Africa is facing several of its own unique challenges. The South African credit rating was recently downgraded to junk status, frequent cabinet reshuffles have created political uncertainty, unemployment remains high and persistent, high inequality and GDP growth is struggling below 1 percent. Small and medium sized enterprises (SMMEs) and entrepreneurship have long been seen as a solution for some of these problems but entrepreneurs in South Africa are also struggling. South Africans entrepreneurial intentions have dropped from 15.4 percent in 2013 to 10.1 percent during 2017, with those who do venture into entrepreneurship having a failure rate of between 70 and 80 percent within the first five years (Herrington *et al.*, 2017:6; Friedrich, 2016).

One of the key barriers to starting and running a business, which is relevant to this study, is access to finance and this relationship between finance, entrepreneurship and economic growth has been the subject of intense study since the early 1990s (Herrington *et al.*, 2017:49; King & Levine, 1993: 513). Using credit, businesses can invest and grow when their sales and owners' equity would otherwise not allow it (Cecchetti *et al.*, 2011:1). Table 2-1 outlines the reasons why businesses exit.

Table 2-1: Reasons for business exit 2006 – 2016

Reasons for business exit	2006	2009	2011	2013	2014	2015	2016	African regional average
Business not profitable	11.4	26	32.6	36.4	42.5	34.9	41.2	41
Personal reasons	14.7	21	15.6	23.2	19.9	17.8	12	17.8
Problems accessing finance	32.1	27.2	24	28.9	19.4	27.6	25.9	17.2
Another job or business opportunity	4.3	6	6	2.9	3.2	2.1	6.8	7.7
Planned exit	2.7	0	0	1.8	0.5	1	0	4.1
Incident		6.4	.4	3.9	9.2	9.8	8.2	5.3

Source: Herrington *et al.* (2017:30)

From Table 2-1 it is evident that after being unprofitable, access to finance is the biggest reason that entrepreneurs exit the market. It is also evident that it plays a much more important part in business failures in South Africa than in other African countries Herrington *et al.* (2017:30).

This has important implications for students, as the importance of entrepreneurs in developing countries cannot be over-emphasised. Research shows that many students have entrepreneurial aspirations; however, they see 'a lack of financial resources' as a major deterrent (Gervase-lwu *et al.*, 2016:167; 179).

2.5 CREDIT AND TECHNOLOGY

Technology and the shift to online services have also played a part in making credit more accessible and have had a measurable impact on the global financial system. Moreover,

electronic banking has created new opportunities by bridging geographical, industrial and regulatory gaps, which provides opportunities for both banks and customers by creating innovative products and services. Furthermore, advances in the areas of communications and information technology (IT) have served as a catalyst in the development of innovative products and services in the banking industry (Narteh, 2012:2). Currently, the global financial sector is one of the largest buyers of IT goods and services, buying 12 percent of IT sector intermediate goods, which has translated into cheaper and more readily available information on financial services on offer and allowed financial institutions to screen client risk profiles better (Sanchez, 2018:915). Kanchan *et al.* (2012:3) found that online banking allows financial institutions to differentiate their products, as well as shift customers to lower cost channels reducing the cost-to-serve. The result being that banks can leverage their distribution networks by offering the right products to the right customer segment through a desired channel, resulting in an overall cost saving, as well as an enhanced customer experience.

One of the ways of reducing cost and enhancing customer experience is by using mobile banking platforms. Mobile banking further increases ease of access by allowing banking activities such as balance enquiries, money transfers and account payments at any time from wherever there is a data connection. Initially, mobile payment services were less successful and of the hundreds that launched most failed (Dahlberg *et al.*, 2008:165). Currently, big tech companies like Google, Samsung, Apple and PayPal are able to dominate the market by integrating the mobile payment functions with the other services on the devices they already have on offer (Muchmore, 2018).

South Africans have had access to Internet banking since 1996, which has made banking, including access to credit, much easier (Singh, 2004:190; Maduku, 2013:77). However, the adoption of electronic banking has been somewhat lagging in South Africa, with only 2.3 million out of 36.8 million adult South Africans with formal bank accounts using online banking. One of the biggest deterrents of online banking is fraud (Mujinga *et al.*, 2018:2). The most frequent types of banking fraud are phishing attempts and sim-swaps, where criminals gain control over the victim's bank account and debit order fraud where criminals load unauthorised debit orders onto the victim's account (Vermeulen, 2018; Ismail, 2017).

Credit card fraud rose from R434 million in 2016 to almost R437 million in 2017 (Dano, 2018).

2.6 CREDIT IN SOUTH AFRICA

South Africans are renowned as big spenders, living on credit and not saving enough for the future (Thomas, 2015). South Africans are counted as the most indebted nation in the world, with 86 percent of South Africans having some kind of debt (Ferreira, 2017). The South African government is also deeply indebted and government debt is close to R3 trillion and interest repayments are close to R150 billion a year (Anon., 2018g; Maynard, 2017). Access to credit by lower income earners and people from previously marginalised population groups led to a significant growth in credit consumption (Schussler, 2011; Hurwitz & Luiz, 2007:128). This increased credit consumption led to an increased spending of 375 percent between 1994 and 2008 when the global recession struck and credit controls became much stricter. This translates into an increased spending of 78 percent at real prices, accompanied by a 44 percent increase of consumer indebtedness (Jacobs & Smit, 2010:11). A significant part of the increase occurred between 1994 and 2002 and provided a very positive stimulus for economic growth but with the downside that it occurred at the expense of household saving (Prinsloo, 2002:63).

During its peak, just before the 2008 financial crisis, household debt as a percentage of disposable income reached a high of 82 percent but then declined, mainly due to the implementation of the NCA (34 of 2005) (South African Reserve Bank, 2010). The NCA did not completely slow down borrowing and record low interest rates caused debt to grow from R550 billion in 2007 before the recession to R1.6 trillion in the first quarter of 2015. This does not reflect loans between individuals, as many South Africans are turning to friends, family and private micro-lenders, further fuelling the debt crisis (Anglo American, 2016). The reason why people are using alternative sources for loans is to be found in the NCA. Formal sector lenders are now required to run checks to determine if borrowers can afford to repay a loan. If borrowers cannot afford the loan, then they often turn to other sources (Dirk, 2014).

According to the 2017 Credit Bureau Monitor, of the 24.68 million South Africans who are credit-active, approximately 19 million were in arrears on one or more of their accounts

and approximately 14 000 applied for debt review each month (National Credit Regulator, 2017). Credit and store card debt for which payments have been due for 120 or more days is estimated at almost R18 billion (Smith, 2018a). The household debt to disposable income ratio was 71.4 percent at the end of 2017 and stood at R1.69-trillion with some workers spending more than 75 percent of their net salaries on debt instalments (Ferreira, 2017; Anon., 2016a).

Moreover, South Africans are not saving money. High unemployment, low growth in per capita income and low productivity, contribute to a low domestic saving rate, which has declined from 24 percent before 1990 to 16 percent in 2015 (Ndweni, 2015). The net saving ratio (household saving as a percentage of disposable income) has dropped to - 2.3 percent, which means that people are dipping into their savings to fund spending (Thomas, 2015).

According to the National Credit Regulator (2017):

- By March 2017, 24.68 million South Africans held 82.43 million accounts, a decrease of 3.0 percent from 2016.
- 76.1 percent of these were classified as in good standing.
- 68.8 percent of accounts were classified as current.
- 7.3 percent were behind on one or two instalments.
- 17.8 percent had missed three or more instalments.
- 4.6 percent had adverse listings.
- 1.5 percent had judgments or administration orders.

Figure 2-1 illustrates the status of South African consumers' credit accounts.

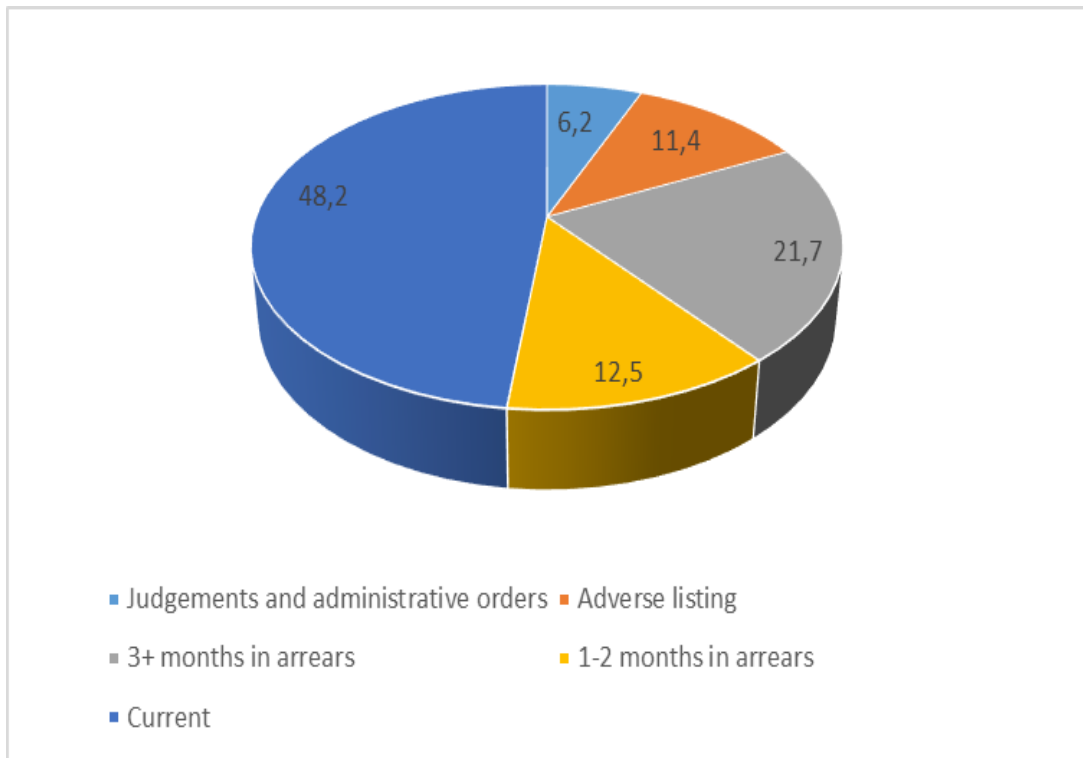


Figure 2-1: Status of South African consumers' credit accounts

Source: National Credit Regulator (2017)

The information in Figure 2-1 suggests that South Africans are spending more than they earn. This has dire consequences for people who are unprepared for unexpected economic hardships and pensioners who are not prepared for their retirement (Thomas, 2015). According to statistics from debt counselling companies, men are more likely than women to become over-indebted (Ndlendle, 2017). However, as a group, single women are struggling the most, often trapped in poverty, over-indebted and struggling because so many are both single parents and sole breadwinners (Lombard, 2018; Anon, 2018h).

2.7 SOURCES OF CREDIT

According to the National Credit Regulator (2018), there are more than 6 000 registered credit providers in South Africa. A credit provider is defined as:

- A party that provides goods or services in terms of an instalment agreement. This is a sales agreement in which the goods or services are delivered immediately but the purchase price is paid over time in instalments.

- A person that allows consumers to pawn goods for money or services. Money is lent to a person who gives an item as security for payment.
- A party that provides credit to consumers. Any party that lends money to consumers with the agreement that it will be repaid in future with added interest. This includes banks, micro lenders and credit card facilities.
- A party that gives consumers a mortgage such as a home loan. This is a loan secured against an asset, which is forfeited if the loan is not repaid (Anon., 2018a).

Credit providers provide secured and unsecured loans. Secured loans are backed by an asset that is collateral for the loan, such as a home loan. Unsecured loans are made based on the borrower’s credit history and income; for example, personal loans or credit cards (Irby, 2016). Unsecured loans, including “short-, intermediate- and long-term credit extended to individuals through regular business channels, usually to finance the purchase of consumer goods and services or to refinance debts incurred for such purposes” (Liao & Liu, 2012:1263). According to Old Mutual financial services (Old Mutual, 2018a), there are advantages and disadvantages to each, as outlined in Table 2-2.

Table 2-2: Secured and unsecured loans

Advantages	Disadvantages
Secured loans	
Easier to obtain	Asset could be forfeited
Can be restructured and used to consolidate debt	Longer repayment periods increase the amount of interest repaid
Lower interest rates	
Unsecured loans	
Useful for emergencies	Higher interest rates
Can be used to cover expenses	Stricter requirements based on income

Source: Old Mutual (2018a)

There are also two other major distinctions, namely instalment and non-instalment credit. Instalment loans, also known as closed-end credit, must be repaid in a specific number of equal payments; examples are home loans and car loans. Non-instalment loans, also known as open-ended credit, are extended in advance of any transaction and consumers do not have to reapply before each transaction. The resulting debt can either be repaid in full or through a series of equal or unequal payments, usually monthly. Credit cards are an example of non-instalment loans (Chien & Devaney, 2001:165).

The amount of credit that is available to a person, as well as the interest rate that will be charged, is based on their credit rating. This is done by calculating their Fair, Isaac and Company (FICO) score. According to O'Neill (2010:59), FICO scores are determined by looking at factors such as:

- Previous payment history: The most important factor looking at the history of on time payment.
- Amounts owed relative to credit limits: Also called a credit utilisation ratio, this examines how much of the maximum credit available the consumer has used.
- Length of credit history: People who have longer credit histories receive higher scores.
- Types of credit used: Consumers who use more than one type of credit score higher.
- New credit: If a consumer recently applied for a number of new credit lines, it will lower the score.

A 2015 report on South African consumer credit revealed the average South African borrower was 42 years old, had a monthly income of R13 147 and a credit score of 618 (high risk). In addition, 41 percent of the 22.5 million South African consumers who used credit in 2015, was considered a very high risk (Anon., 2015e).

Research by the National Treasury and Financial Services Board (FSB) found that contrary to the NCA, many credit providers:

- do not check whether clients are able to afford credit,
- fail to disclose hidden costs or the total cost of credit over the full period,

- encourage consumers to spend more than they can afford,
- discourage price comparisons,
- charge higher premiums on life cover than they should (Du Preez, 2014).

In answer, the government amended the NCA and now requires lenders to check consumers' bank statements, outstanding debt and expenditure before lending money (Dirk, 2014). Figure 2-2 illustrates the types of credit used.

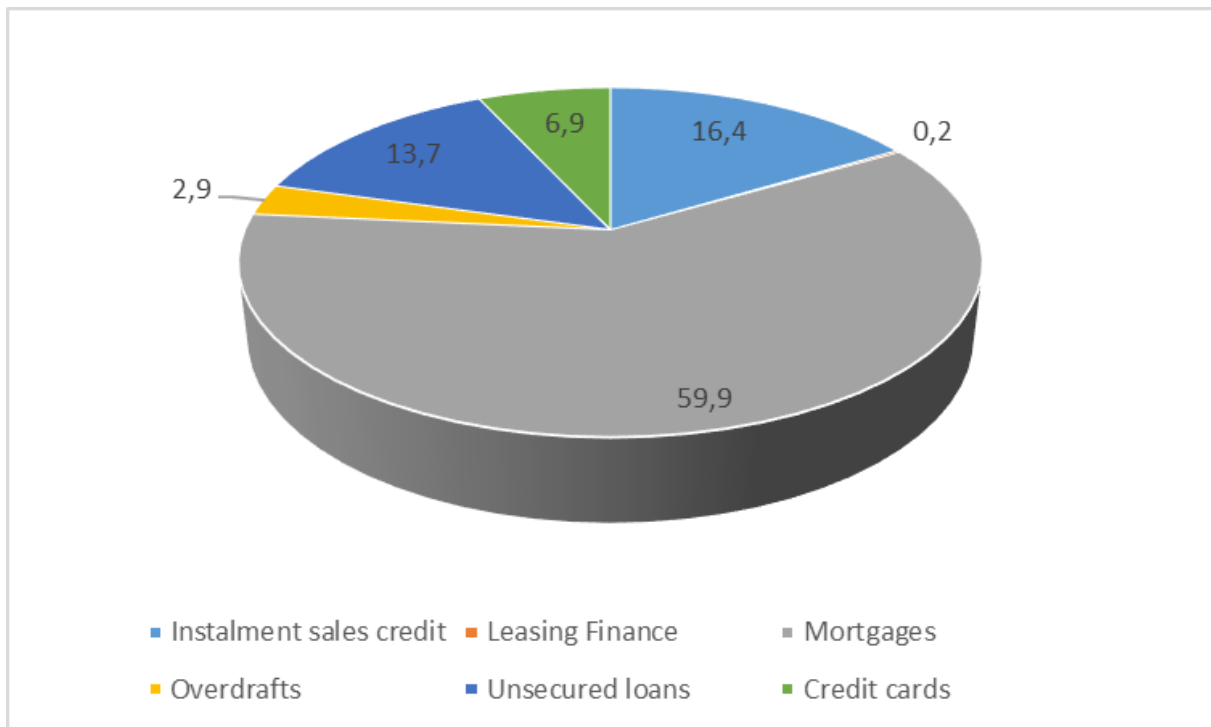


Figure 2-2: Types of credit used, by total value

Source: Momentum South African Household Wealth Index Q1 (2017)

As shown in Figure 2-2, mortgages constitute the majority of credit usage.

The following section includes a discussion of the most prevalent credit providers and the types of credit relevant to the target population of this study.

2.7.1 Banks

The primary function of a bank is to collect surplus funds in the form of deposits and then distribute these funds in the form of loans to those in need (Gobat, 2012). Loans are in

the form of secured and unsecured credit. Secured credit loans are loans made against an asset of the debtor, which the bank may sell if the debtor defaults while unsecured loans are not attached to any asset (Caldwell, 2014; Pritchard, 2014).

The South African banking system is well developed and compares favourably to those in industrialised nations, ranked third out of 148 in the World Economic Forum Global Competitiveness Survey (Banking Association of South Africa, 2014:1). The South African banking sector is made up of a total of 35 banks in the South African, 10 are locally controlled, six are foreign controlled, 14 are branches of foreign banks, three are mutual banks and at least two are under liquidation. There are also 38 authorised foreign bank representatives active in South Africa (Simatele, 2015:818). The four major banks that dominate the South African financial landscape are ABSA, FNB, Nedbank and Standard bank, along with the two smaller banks, namely Capitec and Investec (Steyn, 2016). Today, as many as 36.8 million adult South Africans have formal bank accounts and 2.3 million South Africans use online banking (Mujinga *et al.*, 2018:2). Research into the banking behaviour of Generation Y revealed 82 percent of 18 – 24-year olds have bank accounts and primarily use cell phones and Automatic Teller Machines (ATMs) to access their money (McDonald, 2015).

The banking industry is a highly competitive and ever-changing environment due to factors such as government regulation, a growing middleclass and technological innovation (Harris, 2013; Singleton & Verhoef, 2010:536). The South African banking sector weathered the 2008 financial storm by maintaining strong fiscal stabilisation policies; however, it has since suffered due to low economic growth (Du Toit & Cuba, 2017:436). Banks provide various forms of credit as discussed below.

2.7.1.1 Credit cards

Credit cards are a form of unsecured, non-instalment credit (Chien & Devaney, 2001:165; Irby, 2016). A credit card is a payment card in which the issuer pays a merchant for goods and services based on the holder's promise to repay the issuer for them some time in the future. The holder has a revolving account and a line of credit on which he or she has to make monthly payments and the issuer charges the holder interest on the amount outstanding (O'Sullivan & Sheffrin, 2003:261). Close to 9 million credit cards are in issue

in South Africa (Kearney, 2016). South Africans spend R26 billion a month with credit cards and collectively owe R108 billion (Groenewald, 2018; Nhlapo, 2018). A growing number of these being students who are increasingly being targeted, not only for student loans but also student-specific credit cards on offer to entice prospective young clients (Goko, 2013). The 5th Annual Student Village Student Spend Report found that 29 percent of students had credit cards in 2017 (Anon., 2017), significantly lower than the 45 percent reported in 2012 (Goko, 2013).

2.7.1.2 Vehicle loans

Consumers buy cars from car dealers, which are financed by banks and are often repaid over 72 months (Lamprecht, 2014). According to Statistics South Africa, 4.8 million South Africans own one or more cars and new car sales continue to grow despite challenging economic conditions (Omarjee, 2018). South Africans currently have R383 billion worth of vehicle loans, with almost R3 billion being in arrears (Groenewald, 2018).

2.7.1.3 Personal loans

A personal loan is an unsecured debt in which the financier loans money to a person to be repaid over a certain period in fixed instalments, including interest. Owing to the increased risk of an unsecured loan, the interest rate is usually higher than the interest charged on a secured loan, like a home loan (Momentum, 2018). South Africans have personal loans to the value of R245 billion (Groenewald, 2018). Personal and short-term 'pay-day' loans make up almost 59 percent of unsecured credit in South Africa (Anon., 2018d). The 2017 Old Mutual Millennial report found that 64 percent of people belonging to Generation Y, compared to 14 percent among previous generations, had a personal loan and 35 percent compared to 13 percent of their income was spent on servicing the interest on debt (Old Mutual, 2018b).

2.7.1.4 Home-loans/long-term loans/bonds

A home loan or bond is a long-term secured debt with fixed repayments. The holder of the bond retains the right to the property until the debtor has repaid the principal amount as well as the interest on the loan (O'Sullivan & Sheffrin, 2003:197). Home-loans are not a type of consumer debt but are discussed shortly because they are the largest type of

credit by value and home-loans influence the ability of consumers to obtain more debt (Liao & Liu, 2012:1263). According to Ferreira (2017), home-loans are considered a wealth-creation type of debt as the value of the house or fixed asset will generally appreciate. South Africans owe R807 billion on home-loans (Groenewald, 2018). Home loan approvals reached 77 percent in 2018, the highest since the introduction of the NCA. The average home price was R1.2 million, while the average first-time home buyer paid R900 000 (Anon., 2018e).

2.7.1.5 Student loans

Although students credit use is lower among working consumers, students are an important market segment to credit providers looking to build brand loyalty early on and because of students' role as early-adopters and trendsetters (Anon., 2013; Nga *et al.*, 2011:245; Noble *et al.*, 2009:617; Mansfield & Warwick, 2000:617). Student loans are unsecured bank loans to students to pay for tuition and costs associated with their studies, usually offered at a lower interest rate than credit cards and other forms of credit (Javine, 2013:368). Only interest is paid until the student finishes his or her studies, after which the capital also needs to be repaid. Student loans are repaid in four to five years and a parent or sponsor is expected to sign as surety. While interest on a personal loan can be as high as 28 percent (based on the individual credit risk of the client), students generally will be charged interest rates of prime to prime plus six percent, much lower than that charged on personal loans (Fisher-French, 2017).

2.7.2 Retailers and service providers

Store cards are payment instruments that also serve as a source of financing. It can only be used at stores affiliated with the issuer and is used by stores to increase sales and attract customers (Lee & Kwon 2002:240). In-store cards include cards typically offered by retailers like Woolworths, Edgars, Ackermans and Foschini, which enable customers to purchase items over a fixed period, paying a monthly instalment but at a high interest rate (Anon., 2018b). Very often, these store cards also have a loyalty scheme, which rewards users for repeat purchases and encourages loyalty to the store or group in that way (Anon., 2017b). Almost 3 million new store accounts are opened annually in South Africa, with an average current balance of R2 836. Generation Y consumers have on

average three cards with a total balance of R2 655 (Anon., 2018b). Store card prevalence in 2018 is outlined in Table 2-3.

Table 2-3 Store card prevalence in 2018

Age	Average number of Store cards	Average total balance
18-29	2.8	R2,655
30-39	4.54	R4,209
40-49	3.11	R5,494
50-59	1.67	R6,100
60-65	0.36	R5,632
65+	0.24	R3,932

Source: Anon. (2018b)

2.7.3 Microfinance

Microfinance refers to the supply of financial services, often small, unsecured loans, to poor individuals or groups of individuals that often do not have access to formal financial services and often plays a critical role in the informal economy, by providing loans to the informal sector (Mogale, 2007:346). One of the largest problems that necessitated the creation of the NCA was the emergence of an unregulated micro-lending industry, which took advantage of loopholes in the then existing legislation and lent money at extravagant interest rates (Kelly-Louw, 2008:200). Some of the problems that plague the industry include charging 30 percent interest a month, confiscating ID books and debit cards and, in some instances, micro-lenders have been found to deduct emolument attachment orders of almost half the salary of the indebted, in contravention of the NCA stipulations (Ryan, 2017; Hartley, 2015). Research found that there are an estimated 40 000 *Mashonisas* or illegal micro credit providers in the country who do not comply with the NCA (Hlatshaneni, 2018). Consumers were often placed in a position that forced them to take new loans to pay old loans, which further aggravated their financial problems and caused many people to become over-indebted, meaning they were unable to repay their loans, while interest charged on those loans increased their obligations (Stoop,

2009:368). This unending debt spiral created labour unrest such as the deadly labour unrest at Marikana as the salaries people earned became insufficient to meet their obligations (Anon., 2015c). Although the NCA did provide relief, almost 20 percent of South Africans borrowed from private informal lenders and up to 40 percent of people who use micro-lenders have done so to buy food and other necessities (Erasmus, 2015; Anon., 2015c).

2.7.4 National Student Financial Aid Scheme (NSFAS)

The National Student Financial Aid Scheme (NSFAS) was established under the NSFAS Act (Act 56 of 1999) to fund tertiary students in need. NSFAS funds 450 000 students and has a loan book of R24 billion (Gumede, 2016). From 2018, NSFAS has been providing free education to students whose parents earn less than R350 000 p.a. (Mabuza, 2018). This is largely the result of the countrywide demonstrations due to rising student fees during October 2014. Even after the government submitted to the students' demands that fees should not be increased, the protests continued. Student complaints mainly centred on the assertion that NSFAS is not sufficient to meet their needs and that tertiary education should be free (Cele, 2016; Pretorius, 2016). The programme has also been plagued by several problems, however, as successful graduates are failing to repay their loans and corruption is rife with recipients selling book vouchers for cash (Badenhorst, 2018; Gumede, 2016).

2.7.5 Cell-phone contracts

The value of cell-phone contracts is often underestimated. Vodacom has 5.4 million post-paid contract subscribers, MTN 5.5 million and Cell C 1.5 million (Vorster, 2018; Liang, 2018a; Liang, 2018b). South Africans bought 3.2 million smartphones during 2017 and research shows that the average township household spends an estimated R350 to R400 per month on cell-phone airtime and data (Anon., 2018f; Anon., 2017a). This is a significant expense when the average household income is only R8 600 per month and for the 21 percent of South African households for whom the main source of household income is grants (Merten, 2016; Anon., 2016b).

2.7.6 Loans from family and friends

The financial position of many South Africans is dire and seven out of ten middle class consumers claim that they are financially distressed (Anon., 2017c). Many turn to banks and micro lenders or get a second job if they are able to. A recent study by Old Mutual found that more than a third of the participants had a secondary job, many of them out of need (Mdaka, 2017). This is not enough though and up to 71 percent of South Africans turn to family and friends to borrow money, not only because it is easier and cheaper but also because many are over-indebted and credit providers are unable and unwilling to extend them any more credit (Anglo American, 2016; Erasmus, 2015; Dirk, 2014).

2.8 OVER-INDEBTEDNESS AND THE NATIONAL CREDIT ACT

The changing perception of debt and the factors that correlate with individual debt has been the subject of research since the 1940s (Lea *et al.*, 1995: 683). The uptake of credit has increased over the past two decades due to the increased liberalisation of credit. This has led to a reduced credit constraint on households, reduced deposits for first time home buyers and increased availability of collateral backed loans. This, in turn, has led to an increased average propensity to consume (Aron & Meullbauer, 2013:162-163). Coinciding with the increase in credit was the feeling that consumer credit should not be restricted and that access to credit should not be limited on behalf of those few who would be unable to manage their own credit (Ironfield-Smith *et al.*, 2005:134). That being said, getting out of debt is not an easy proposition for many. Many consumers have multiple credit lines and are unable to repay each of them timeously (Kettle *et al.*, 2016:461). This has led to a dramatic and global increase in personal bankruptcy and blacklisting (Livshits, 2015:594).

Being blacklisted is the result of late payments, missing payments, not paying at all or avoiding credit providers. This information is stored electronically and may negatively impact future finance, interest rates or applying for a job or rental contract (Barry, 2014). This has prompted the South African government to take steps to help blacklisted consumers by wiping clean adverse credit information on blacklisted consumers (Ensor, 2013). According to Mawson (2015) the credit amnesty did not expunge existing debt but only cleared information that classified consumers as “delinquent, default, slow paying,

or absconded” and enforcement action like “handed over for collection, legal action or write-off”. However, many of those whose records were cleaned have incurred negative listing again, raising doubts about the effectiveness of the amnesty.

The other major action that the government took to assist consumers and regulate the business sector was through the creation of new legislation, namely the NCA. Some of the problems identified that government hoped to address included outdated and uncodified legislation, high cost and limited access to credit, vulnerable and uninformed consumers being taken advantage of, reckless granting of credit and unethical debt collection (Kelly-Louw, 2008:200). These problems were addressed in the NCA (34 of 2005), which was enacted to protect debtors and to enable the government to regulate credit givers effectively. The NCA applies to all natural persons regardless of the amount of debt, which is different from other countries where similar laws have certain requirements in terms of the amount of debt (Otto, 2010:271).

The main objectives of the Act are:

- To promote a fair and non-discriminatory credit marketplace
- To provide regulation of the credit industry and credit information
- To establish the National Credit Regulator and National Consumer Tribunal
- To improve access to credit for consumers and improve the standard of information provided
- To promote black economic empowerment and ownership within the credit industry
- To prohibit unfair practices within the credit industry and the marketing of credit products
- To promote responsible lending by credit providers in order to avoid over-indebtedness and reckless credit granting
- To seek to address consumer indebtedness by introducing debt counselling and debt restructuring
- To regulate credit providers, credit bureaus and debt counsellors (National Credit Act, 2005).

In terms of the NCA, the office of the National Credit Regulator was created and tasked with receiving and investigating complaints and reporting to the government. The Regulator also endeavours to educate, inform and empower consumers and protect them from unscrupulous credit providers. This is done in various ways such as the requirement that credit providers now provide consumers with a breakdown of costs, including fees, commissions, total interest, as well as the total amount to be repaid for the term the finance is given (Stoop, 2009:277; 374).

Aside from the financial implications of over-indebtedness, over-indebtedness may also lead to negative psychological effects. This includes decreased confidence related to managing one's money, lower self-esteem, decreased sense of financial well-being, lower productivity and higher levels of overall stress. It may also cause negative emotions such as anxiety, worry and depression and increased debt has also led to increased consumer debt stress (Dunn & Mirzaie, 2015:201; Shapiro & Burchell, 2012:2; Furnham, 2006:185). In a study by Garman *et al.* (1999:167) on stress amongst consumers experiencing financial problems, participants reported symptoms like disturbed sleeping patterns, changes in eating habits causing either an increase or decrease in weight, increased alcohol consumption and neglecting either their parents, partners or children.

Lea *et al.* (1995: 682) found certain psychological factors, other than income, determine how well households deal with debt. These factors include:

- Social support for debt: Debt has lost its negative connotation and a culture of indebtedness has made debt more socially acceptable.
- Economic socialisation: Cultural norms are shaped by experiences within families and people's credit use tends to correlate with those of their parents.
- Social comparison: The phenomena of "Keeping up with the Joneses" or comparing oneself to others with more economic resources and feeling entitled to enjoying the same leads people to outspend their income.
- Money management styles: Weak money management, lack of financial knowledge and understanding.
- Consumer behaviour: Inappropriate purchasing patterns such as treating status or luxury items as necessities.

- Time horizons: People with a higher “subjective discount rate” are less able to defer gratification. A subjective discount rate refers to perceiving future costs and benefits as less valuable than present (Daly & Farley, 2011:190).
- Attitudes: A correlation exists between people’s attitude towards debt and their debt behaviour.
- Locus of control: People with a strong external locus of control are more likely to get into debt (Lea *et al.*, 1995: 682).

Similarly, Lunt and Livingstone (1991:622, 624) found that psychological factors can have as much of an influence in debt management as economic factors. The psychological factors that influence savings intentions are self-control, fear of economic uncertainty and pessimism about the economy. Self-control and delayed gratification are often more prevalent in older, well-educated, mid- to upper-class individuals and those who earn more and who have higher levels of education saved more than the less educated.

2.9 STUDENTS AND MONEY

Apart from a higher future earning potential, students are an attractive market for credit providers because there is a fresh market of students to target each year and students tend to remain loyal for years after deciding on a credit provider. At the same time, students are also seen as vulnerable consumers who get pushed into debt with easy credit because they have little experience and knowledge about credit and are thus unable to evaluate and compare complex product offerings (Bevan-Dye *et al.*, 2009:176; Braunsberger *et al.*, 2004:358). Their spending habits and attitude towards money and debt are often shaped by having received greater financial support during childhood from indulgent parents (Kim & Jang, 2013:3; Kirkcaldy & Furnham, 1993:1079). As such, marketing credit to students has led to higher levels of personal debt as well as students getting into debt at younger ages (Rivard, 2002:17). In later life, those Generation Y members who decided to study and used student loans are more likely to find themselves in financial distress, especially if they did not complete their studies (Bricker & Thompson, 2016: 672).

South Africa has one of the most unequal societies in the world and although many Generation Y students were born after the fall of apartheid, they are not yet free from

poverty and inequality (Posel, 2010:158). One of the reasons for this is growing unemployment. According to the expanded definition of unemployment, the unemployment rate in South Africa is 36.6 percent (Peyper, 2017). Considering that many young people are still studying, 30 percent of South Africa's 10.3 million youths were not in employment, education or training in 2017 (Van der Merwe *et al.*, 2018). Many youths are not only unemployed but also unemployable due to a range of socio-economic factors such as low levels of education, little work experience and not having the literacy, numeracy and communication skills needed in the labour market (Cassim & Oosthuizen, 2014). Of the more than a million children who started school in 2002, only 571 819 (57 percent) made it to matric in 2014 (Govender, 2016). This is due in part to the state of the South African primary education system, with between 75 percent and 80 percent of schools classified as dysfunctional and/or failing to impart the necessary skills to students (Wilkinson, 2015). Only 12 percent of students who start school will have access to university (Spaul, 2016).

South Africa has 26 HEIs, which are classified as traditional universities, universities of technology and comprehensive institutions. Together, they serve approximately 1 000 000 students, according to the Council of Higher Education (Anon., 2018i). Among those Generation Y students who do manage to enter tertiary educational institutions, the completion rates for diplomas and certificates is only 47.8 percent and 61.6 percent for degrees (Jeynes, 2016). Of those youths who do manage to obtain some form of qualification, only about 6 percent of graduates and 18 percent of those with other tertiary qualifications are unemployed (Skosana, 2018; Spaul, 2016). This may be one of the reasons that fake degrees have taken on such huge proportions that a law to combat this phenomenon is now being considered (Mkhwanazi, 2018).

South Africa has one of the highest rates of public investment in private and public education in the world, at around 7 percent of GDP, or 20 percent of total state expenditure but, unfortunately, it is not enough (Anon., 2015a). Tertiary education competes for funding with other government projects and student fees are levied to finance the shortfall (Johnston & Barr, 2013:168). Prospective students who cannot afford tuition are not without options, however, South Africa, like most other countries, also indirectly fund universities by providing financial aid to students either in the form of

bursaries or loans and, in addition, students are able to get student loans and credit cards from banks (Javine, 2013:368; Booij *et al.*, 2012:34).

The South African government initiative to increase student funding is called the NSFAS. A student loan or bursary from NSFAS covers tuition fees at any of the 26 public universities in South Africa. The costs include tuition fees, residence or private accommodation costs, food, books and travel. This loan must be repaid to NSFAS after completion of the degree and interest is charged 12 months after a student has completed his or her studies by either graduating or dropping out (Patel, 2016).

Student debt and protests are not unique to South Africa. This is a global phenomenon and with increased levels of students' debt in many countries across the world, student debt has become an increasingly contentious issue (Usher, 2005). This is mainly due to students' belief that borrowing to fund education is a good investment, with long-term rates of return that exceed the cost of borrowing for most and the perception that a degree is essential for entry into lucrative non-manual careers (Walker & Zhu, 2011:1178). A study among nursing students in New Zealand found that 92 percent of the participants had some form of student debt, with 85 percent having a government student loan (Moore *et al.*, 2006). The total student debt in New Zealand surpassed \$14 billion and New Zealand also experienced student protests against a government budget that hinders public access to universities. What began in 2011 as a series of protests and occupations, erupted into barricades of the streets in central Auckland in 2012, all demanding an end to rising fees and indebtedness (New Zealand Treasury, 2014; McMahon, 2012). In the USA, students attending the Million Student March demanded a US\$15 minimum wage for students, free tuition at public universities and the abolition of student debt (Mulhere, 2015).

Although research by Tumen and Boaz (2008) suggest that loan schemes are not a barrier to participation in tertiary education, it has also been claimed that student loans have minimal effect on participation in tertiary education (Biggar & Butterworth, 2002; Fletcher, 2002; Gill *et al.*, 2001). Research suggests that student loans alone may not produce the desired effect of increased participation and graduation rates (Heller, 2008, Dwyer *et al.*, 2012). This means that simply continuing to increase the number of loans available to students may not produce the desired effects and other complementary

financial aid policies may be necessary (Elliott & Lewis, 2013:353). Excessive student loans may also have a negative effect with research showing that more students drop out due to debt than due to academic failure. Research shows that loans combined with grants have a more positive effect on student retention than loans only (St. John *et al.*, 2001:414; Mansfield & Warwick, 2000:619).

2.10 INFLUENCE OF NON-ECONOMIC FACTORS ON CREDIT USE

People cite various reasons for using credit, including using credit cards and store cards. Some people feel that it is safer, some feel that it is more convenient or gives them a record of purchases and credit is also often used for emergencies. From a functional perspective, however, the uses of credit can be narrowed down to obtaining cash, paying for goods and services or as a source of revolving credit (Lindsey, 1994:12). There are, however, several other important factors at play such as financial literacy, culture and attitudes.

Financial literacy is a grouping of resources, skills and prior knowledge used to effectively manage information and make decisions with an understanding of the financial consequences of that decision (Cude *et al.*, 2006:103). Financially-literate individuals make better financial decisions and are better able to create a well-secured financial future while adding value to their own personal financial life and to those of their families and the community (Hilgert *et al.*, 2003:309). Furthermore, financially-literate individuals are well-informed on the issues of financial management such as assets, banking, investments, credit, insurance and taxes and financial literacy can improve financial inclusion and financial behaviour (Rootman & Antoni, 2015:474; Hogarth, 2002:14). A lack of financial literacy and skills often results in harmful financial decisions and, ultimately, results in high financial debt and severe credit card usage (Boon *et al.*, 2011:151; Sabri *et al.*, 2012:156). The low level of financial literacy worldwide has received increasing attention and thus the effect thereof on financial decision-making has increasingly become the focus of academic researchers.

According to Tang and Baker (2016:165), the study of financial literacy can be divided into objective financial knowledge (what a person actually knows) and subjective financial knowledge (what a person believes he or she knows). Subjective financial knowledge is

important because a positive self-perception of knowledge will influence the confidence a person has making financial decisions and taking risks. Xiao *et al.* (1995:155) indicate that students often know general facts about money but not the specifics. South African youths tend to turn to their families for financial advice rather than financial institutions, which may exacerbate the effects of bad financial choices (McDonald, 2015). Even students who never talk to their parents about money may learn from them by watching and listening to their parents talk and examining the financial decisions they make (Britt, 2016:543).

Lown (2011:54) asserts that financial information and education alone are not sufficient to change financial behaviour. Studies indicate that self-esteem and a positive self-perception of one's financial knowledge level plays a significant part in financial management decisions (Tang & Baker, 2016:164). Hayhoe *et al.* (1999:654) found that preventative financial education did not significantly change credit use since students only started to respond to financial education after they have accrued significant debt. This suggests that more research is needed to identify potential causes of student credit use so that effective prevention programmes can be designed and implemented (Adams & Moore, 2007:101).

These potential causes of credit use include attitudes or characteristics that influence a person's propensity towards credit use. These causes are not always rational but very often governed by emotional factors, which Forman (1987:2028), in his pioneering work on the connection between money and psychology refers to as "powerful and often unrecognised emotional forces". A great deal of this research has focused on materialism, self-esteem and lack of self-control. Material possessions give the owner a feeling of well-being, security and happiness, especially among younger consumers. Researchers have found a positive relationship between materialism and compulsive buying and failures in self-control. This leads individuals with higher levels of materialism to spend more on luxury and unnecessary items, which may hold negative financial consequences if the increased spending is funded by debt. Self-esteem also influences delaying gratification and impulsiveness. Therefore, a lack of self-esteem may encourage harmful financial decisions (Khare, 2014:30; 31; Kim, 2013:759; Wang *et al.*, 2011:179; Joji & Raveendran, 2007:550; Watson, 2003:723-739).

2.11 CONCLUSION

Consumers' attitude towards credit use has shifted over the last century. Where credit was once avoided, using credit to finance expenses is now normal and, consequently, many consumers have become deeply indebted. It is not only in Western countries that the attitude towards debt has shifted. While the USA still has the highest levels of consumer debt, consumer debt in developing countries is also growing. The availability of credit has had many benefits. Credit increases demand for consumer goods and stimulate growth. It enables entrepreneurs to start new businesses and allows students who cannot otherwise afford it to study.

South Africa has a well-developed financial sector with the banking sector ranked third out of 148 in the World Economic Forum Global Competitiveness Survey. In addition, retailers and the micro-finance sector also offer loans to consumers, although often at higher interest rates than banks. This easy availability of credit contributed to South African consumers becoming among the most heavily indebted in the world. Another reason for the high levels of consumer debt is that many consumers lack the knowledge and experience to make prudent financial decisions. Research to determine the financial literacy rate in different countries rated South Africa as having the lowest financial literacy rate in the world (Jappelli, 2009:436).

To protect consumers from both themselves and unscrupulous credit providers, the South African government enacted the NCA. While the NCA has been successful in curbing the worst excesses and even provided some protection to South Africa during the 2008 financial crisis, it has not prevented or slowed credit use by consumers. Almost 25 million South Africans, eight million more than the total number of employed people in South Africa, use credit while seven out of ten middle class consumers are financially distressed.

South African students, like other students all over the world, have also become more indebted. Not only are students using credit to finance their studies, they also use loans to maintain a lifestyle they feel entitled to but usually cannot afford with the expectation that their higher future earning can be used to repay the debt they make as students. As such, not only do Generation Y students grow up in households where credit use is normal, their own credit use during their student years helps them to grow accustomed to

being in debt. There are many other factors, which contribute to credit use. The next chapter will examine the environment that shaped the Generation Y cohort and the attitudes towards material possessions and credit use that consequently developed.

CHAPTER 3

ATTITUDES THAT INFLUENCE CREDIT USE

3

3.1 INTRODUCTION

From an economic viewpoint, individuals are usually regarded as rational decision makers who always seek to increase their wealth and maximise the utilities generated from money (Finn, 1992:658). This is, of course, a very simplistic view, as several other factors exist that influence consumer behaviour, besides accumulating wealth such as status and prestige considerations (Kim & Jang, 2013:39). These factors affect individuals' attitudes toward money and their decisions and behaviours involving money, making the symbolic meaning of money as important an aspect of money as its economic value (Medina *et al.*, 1996:143). These attitudes towards money and debt are generally shaped by a person's experiences during their formative years (Kirkcaldy & Furnham, 1993:1079). Previous studies have shown that conditioning and factors such as lifestyle, upbringing and family structure determine how people think and behave as well as their attitudes towards money and possessions (Rindfleisch *et al.*, 1997:320; Kirkcaldy & Furnham, 1993:1079). These are not the only factors at play, given that emotions, self-esteem and self-control also play an important part, especially in relation to non-essential consumption and purchasing decisions (Rindfleisch *et al.*, 1997:320).

The economist and sociologist Thorstein Veblen (1857–1929) was one of the first people to develop a theory around the emotional value of spending. Veblen introduced the concept of conspicuous consumption in his 1899 book, *The Theory of the Leisure Class: An Economic Study in the Evolution of Institutions*. In it, he attempts to describe how the *nouveau riche* (newly rich) social class who emerged during the Second Industrial Revolution (ca. 1860–1914) spent lavishly on visible goods to prove that they were prosperous (Ordabayeva & Chandon, 2010:48). In the social and historical context, the term conspicuous consumption was narrowly applied to describe members of the upper class who applied their great wealth as a means of publicly manifesting their social power and prestige, be it perceived or real (Charles *et al.*, 2009: 426). The importance people

attach to material possessions is still studied today as it influences the way people interpret their environment and structure their lives (Richins, 2004:209).

This also applies to Generation Y who, having grown up in a materialistic society, are even more driven to use status consumption to display wealth and are always open to new conspicuous products as a means of self-expression (Kim & Jang, 2013:39).

Research indicates that psychological factors and attitudes such as materialism, status consumption and impulsive buying can determine consumer spending and be used to predict consumer credit use (Chen, 2009:768; Fitzmaurice & Comegys, 2006:298; Chien & Devaney, 2001:163; Livingstone & Lunt, 1992:112). This chapter will first examine the world that shaped Generation Y and then how Generation Y relates to material possessions. It will then examine the effects of materialism, status consumption, social comparison, impulsive buying, attitude towards credit and money as a motivator on credit usage intentions amongst Generation Y students. These six constructs are strongly related but are measured using different scales (Kim, 2013:759).

3.2 THE WORLD THAT SHAPED GENERATION Y

Not all authors agree on when the Generation Y cohort starts. Depending on the author, Generation Y members were born anytime from 1977 to 1986. That being said, this study uses the definition proposed by the American sociologist, Markert, who asserts that Generation Y comprises individuals born between 1986 and 2005 (Markert, 2004:21). Similarly, not all authors use the same terminology to identify the cohort. Generation Y is often called Millennials but also “Next generation, Generation me, Echo boomers, Nexters, the Boomlet, Digital generation, Dotcom generation, Net Generation, N-Gens, Generation WWW, Digital natives, Nintendo generation, Sunshine generation, the Do or Die generation, the Wannabes, the Nothing is sacred generation, Cyber kids, the Feel good generation and Non-nuclear family generation” (Srinivasan, 2012:52). Most authors do agree that Generation Y members have been brought up in the age of globalisation, outsourcing, foreign investments, a global recession and a proliferation of information and technology. They are technologically adept and permanently connected to social media,

allowing them to voice their opinions. They are globally educated, confident, assertive, entitled, highly optimistic and idealistic (Edwards, 2017; Srinivasan, 2012:52).

The idea of generational cohorts is based on the notion that important historical events and social trends experienced during a person's developmental years shape the prevailing attitudes and values of a generation and is the foundation for a generational consciousness (Schewe & Meredith, 2004:51). Hawkins *et al.* (2007:124) propose that individuals from each generation usually have similar attitudes, behaviours and values. Members of Generation X are the products of a period of economic and social instability. This led to them becoming individualists who embrace change, which impacted greatly on their attitudes towards career management and employee-employer relationships (Duh & Struwig, 2015; Codrington & Grant-Marshall, 2011:3). The Generation Y cohort, in turn, is often characterised as being well-educated, confident, independent and self-reliant (Broadbridge *et al.*, 2007:526). To understand the different generations and the often contradictory claims made about them, it is necessary to examine the world events that shaped them. Table 3-1 provides an indication of the factors that have influenced the different generations.

Table 3-1: Milestones and characteristics of the various generations

Generation	Milestone	Characteristics
Veterans	The Great Depression	Dedication
	World War I	Sacrifice
	World War II	Respect for authority
		Loyalty
		Honour
Baby Boomers	Assassination of political icons	Optimism
	Civil Rights Movement	Team orientation
	Women's Rights Movement	Work for personal fulfilment
	Cold War	

Table 3-1: Milestones and characteristics of the various generations (continued ...)

Generation	Milestone	Characteristics
Generation X	HIV/AIDS	Sceptical
	Fall of the Berlin Wall	Cynical
	MTV	Independent
	Increased divorce rates	Nonconformist
		Informal
Millennial/Generation Y	The Age of Technology	Confident
	Online social networking	Demanding
	Terrorism	Impatient
	Natural disasters	Lack of job loyalty
	The obesity epidemic	Social
	Pop culture	Diverse
	Iraq War	Educated

Source: Weingarten (2009:28)

The closing years of the 20th century, the years that Generation Y were born into and grew up in, were a period of turbulent change with two major developments that shaped the political, economic and social landscape of the 21st century. The first started with the symbolic dismantling of the Berlin Wall in 1989, which signalled the beginning of a new global economy and the end to the Cold War. This led to drastic economic restructuring to compete in the high technology global environment with significant shifts in the composition of the domestic economies. The second development was advances in information and communication technology such as the Internet, cell phones and social media that provide instant communication and access to information across the world (Virkar, 2015:2; McCready, 2011:12). Generation Y is the first generation that has never known a world without Internet and mobile technology. This, together with growing materialism and prosperity has led to most of them growing up owning computers and televisions and with easy access to the Internet (Grotts & Widner-Johnson, 2013:282;

Van Rooi, 2011:45). Many Generation Y consumers now consider cell phones and other electronics as basic necessities (Hawkins & Mothersbaugh, 2010:132). Therefore, Generation Y individuals have grown up in a period of economic growth supported by internationalisation and strong influences from different cultures (Parment, 2013:3). Generation Y is also the best educated and most culturally diverse generation in history, a combination that has made them more tolerant and open-minded towards different lifestyles and ideas (Noble *et al.*, 2009:618). Consequently, Generation Y are very diverse in values and philosophies on the one hand while at the same time sharing some common traits and attitudes due to the global exposure to digital media driving homogeneity within Generation Y (Duffett, 2015:341; Van Rooi, 2011:45). According to the global teenager hypothesis, due to the homogenising effect of the Internet and television, there is greater similarity in values of teens from different countries, than between teens and older persons in the same country (Schaefer *et al.*, 2004:399). This is also true in South Africa with the South African Generation Y displaying emerging-marketing youth characteristics in some aspects while behaving more like developed-market youths in others, such as how they spend their leisure time (Jordaan *et al.*, 2011:3).

Work-life balance is very important to Generation Y and research shows that they will change professions several times during their lifetime. They are also characterised as being multi-taskers, adept at leading groups and teams, wanting constructive feedback and praise and having a technology advantage (Frandsen, 2009:34; Carver & Candela, 2008:984-991; Thompson, 2007:564-587; Weston, 2006:1-10; Wieck, 2005). Generation Y also expects more organisational accommodation and more freedom to follow their own ideas (McCready, 2011:12-15; Noble *et al.*, 2009:625).

Contrary to the hopes of earlier generations, Generation Y members were not spared hardship. Although parents tried to ensure their safety and security, Generation Y grew up exposed to drugs, violence and terrorism and they have witnessed several natural calamities including tsunamis and earthquakes (Hutchinson *et al.*, 2012:444-450; Srinivasan, 2012:52). In some countries, Generation Y is the first generation to be worse off financially than the previous generation largely due to the 2008 recession, which hit Generation Y hard as well as higher property prices putting house ownership out of reach for many Generation Y consumers (Edwards, 2017).

3.3 GENERATION Y CONSUMERS

“To have is to be” and conspicuous consumption is increasing with each new generation (Bakewell & Mitchell, 2003:97). Generation Y have grown up expecting immediate gratification and often spend money as fast as they acquire it (Xu, 2008:38). According to the Deloitte Millennial Survey (2014), Generation Y is quite different from other generations when it comes to work and spending:

- Generation Y members understand each other better than other older generations do and marketing to Generation Y consumers should thus be done by Generation Y members.
- Generation Y consumers are more resourceful and likely to find original and cheaper ways to solve problems.
- Generation Y consumers grew up in the information age and are used to doing research.
- Generation Y members are well connected, due in part to social media.
- Generation Y members adapt to new situations faster and are not scared to try new ideas.
- Generation Y members are natural problem-solvers and highly entrepreneurial.

Generation Y members are also believed to possess a more aggressive materialistic consumer culture than previous generations and tend to finance their consumption through debt rather than savings (Bakewell & Mitchell, 2003:95-98). Generation Y spends more time online and less watching TV, reading newspapers or listening to the radio but they are still considered very knowledgeable and as trendsetters who conduct online research before making a purchase (Jordaan *et al.*, 2011:2; 4). Advertisers thus see online advertising as an effective way of reaching Generation Y and online marketing income is growing at 25 percent per annum in South Africa (Duffett, 2015:337; 353). Marketers also believe that the drive for instant gratification leads Generation Y to succumb to advertising easier than previous generations (Xu, 2008:37). However, some research indicates that Generation Y consumers are often sceptical of traditional marketing and will rather look to their peers and social media for inspiration and advice

on what to buy (Chuah *et al.*, 2014:534; Kotler & Keller, 2012:176; Bevan-Dye *et al.*, 2009:177).

Generation Y is an expressive generation and are very concerned with their image. Clothes, piercings and tattoos are seen as ways of expressing themselves and they spend more on apparel than any other product category (Cronje *et al.*, 2016:754; Williams *et al.*, 2010:9; Crane, 2007:2). This is also true in South Africa. South African students reportedly spend 40 percent of their income on clothing, 20 percent on technology, 13 percent on personal care, 12 percent on airtime and data and 7 percent on alcohol and pay TV respectively (van Zyl, 2017). Greater social pressure to conform and consume is a key driver of credit consumption among Generation Y for whom borrowing is now a way of life and since Generation Y students have easier access to credit they often accumulate unhealthy amounts of debt and develop irresponsible spending habits (Leclerc, 2012:149; Finney *et al.*, 2007:34; 35).

Parents are typically the primary caretakers and many students go through their tertiary education without taking any responsibility for their personal finances (Borden *et al.*, 2008:24). Generation Y individuals thus often lead a lifestyle that they would be unable to sustain without financial support (Kim & Jang, 2017:156). This lack of responsibility and experience often leads to unwise credit use (Sabri *et al.*, 2012:153; Goldsmith & Goldsmith, 2006:55). In South African, students were spending between R32 billion and R41 billion per annum or as much as R32 000 per person, excluding tuition fees in 2017. Parents and family remain the main providers for students, with 85 percent of students reportedly receiving money from parents and family, 29 percent also receive income from full- or part-time work and 24 percent from bursaries and scholarships (Van Zyl, 2017; Vakil, 2017; Pather, 2014). Students also have a different attitude towards money and spending than previous generations. Research has shown that South African students are indebted and spend more than the average South African. This is concerning since their main source of income is from their parents and families. Women spend more than men do but culture also plays a part in spending patterns (Pather, 2014).

3.4 SOUTH AFRICAN GENERATION Y

South African Generation Y is often also referred to as the “born-frees” because they are the first generation who grew up in the post-apartheid era. On the one hand, they have had better opportunities for education, employment and wealth creation. On the other hand, many were raised in dysfunctional families caused by high levels of HIV/AIDS-related mortality, adult labour migration, unemployment and poverty (Duh, 2016:135). South African Generation Y also grew up in one of the most unequal societies in the world and they are not yet free from poverty and inequality. As a result, South Africa is a very materialistic society. Then President Thabo Mbeki remarked,

It is perfectly obvious that many in our society, having absorbed the value system of the capitalist market, have come to the conclusion that for them, personal success and fulfilment meant personal enrichment at all costs and the most theatrical and striking public display of that wealth. The meaning of freedom has come to be defined, not by the seemingly ethereal and, therefore, intangible gift of liberty, but by the designer labels on the clothes we wear, the cars we drive, the spaciousness of our houses and our yards (Posel, 2010:158).

Recent studies also found that South African young adults are more materialistic (Duh *et al.*, (2014:251). Societies tend to become more materialistic as they progress and material goods become a measure of quality of life (Khare, 2014:30). This increase in materialism is not infinite and people in developed countries tend to be less materialistic than people in developing countries are (Jacobs & Smith, 2010:15). This is because as countries develop and accumulate certain levels of wealth, their citizens shift from materialistic to post-materialistic values. As societies become more prosperous, people depart from their core materialistic goals, such as physical sustenance and the improvement of economic conditions, towards values such as political freedom, self-expression and environmental protection (Combes *et al.*, 2018:286).

In developing countries, materialism can serve as an important driver for economic development since it drives entrepreneurship and innovation (Kharas, 2010:7). High levels of materialism coupled with inequality also have a downside and may lead to social

instability through relative deprivation. The relative deprivation theory proposes that a person will feel deprived if he or she sees another person with something they lack, desire and feel entitled to. This causes a sense of dissatisfaction and resentment. Research has shown that relative deprivation has broad ranging effects on people (Chipp *et al.*, 2011:130). One possible effect is symbolic consumption, which is the process by which an individual uses consumer products as tools to create a desired image. Expensive personal items also serve to signal the consumers' social standing or status. For Generation Y, symbolic consumption serves as a way of forming their identity and gaining a reputation among their peers (Schiffman *et al.*, 2010:338; Piacentini & Mailer, 2004:251). Among South African Generation Y members, *I'khotane*, or 'licking the snake', is a type of symbolic consumption. It is a relatively new phenomenon of burning luxury articles to display wealth. This conspicuous destruction is to show that not only is the person rich enough to afford it, but also rich enough not to need it. Very often, the people taking part in this conspicuous destruction come from low-income backgrounds and are dependent on parents who cannot afford to pay for this behaviour (Ungerer, 2014:1). Therefore, Generation Y consumption is driven not only by practical considerations but also by attitude, emotion and societal pressure.

3.5 ATTITUDES AND INTENTIONS

Human behaviour is incredibly complex to understand and predict. Social attitudes and personality traits have been used in an attempt to do so. In an effort to understand human behaviour better, several models have been developed, including models that measure the influence of attitudes on intentions and behaviour (Ajzen, 1991:179). Similarly, marketers have tried to determine how consumer attitudes influence consumer behaviour and the consumer decision-making process (Blythe, 2013:159).

Consumer behaviour and the consumer decision-making process are influenced and determined by individual psychological factors and group factors (Kreng & Huang, 2011:535). Group factors are the result of interactions with others such as family, peers and reference groups (Mostert & Du Plessis, 2007:91). Psychological factors include feelings, motivations, perception, learning, personality and attitude (Wiese, 2008:131). An attitude is an individual's favourable or unfavourable evaluations, feelings and tendencies towards the behaviour, products or services and will determine how people

react towards objects, people and events (Joubert, 2013:80; Parumasur & Roberts-Lombard, 2013:185). Attitudes are a combination of motivations, emotions, perceptual and cognitive processes. However, attitudes do not stand in isolation and are not set in stone. Attitudes are influenced by an individual's values, standards and norms and can change based on experiences and can be influenced by marketing (Hawkins & Mothersbaugh, 2013:395; McDaniel *et al.*, 2013:224).

“Money is probably the most emotionally meaningful object in contemporary life; only food and sex are its close competitors as common carriers of such strong and diverse feelings, significances and strivings” (Krueger, 1986:3). Money is an emotional subject that affects motivation, well-being and relationships (Lau, 1998:301). Equally, emotions, motivations and attitudes affect how people deal with and spend money. The following sections describe the constructs based on different attitudes that were used in this study.

3.5.1 Credit usage intentions

In an effort to predict behavioural intentions, Fishbein and Ajzen (1975) developed the theory of reasoned action. The theory of reasoned action distinguishes between four variables, namely beliefs, attitudes, intentions and behaviours. Beliefs are either behavioural or normative. The normative belief influences the person's subjective norm on performing the behaviour, while the behavioural belief shapes the person's attitude towards performing a behaviour. Attitude, in turn, affects the intention to perform the given behaviour and those intentions serve as the primary antecedents of the behaviour (Fishbein and Ajzen, 1975:510; Madden *et al.*, 1992:3). Therefore, according to the theory of reasoned action, if people perceive the suggested behaviour as positive (attitude) and believe their peers approve of the behaviour (subjective norm) then they will consequently have a higher intention to perform the behaviour and the higher intention is more likely to translate into actual behaviour. Several studies support this hypothesis and found a high correlation between subjective norms and behavioural intention, attitudes and behavioural intention and behavioural intention and subsequently behaviour (Sheppard *et al.*, 1988:325). Research also found that the relative importance of attitudes increases, as people become more action-orientated (Bagozzi *et al.*, 1992:505). The theory of planned action is illustrated in Figure 3-1.

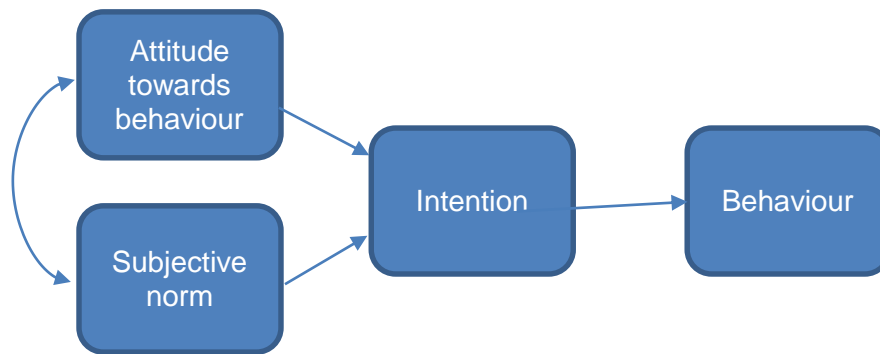


Figure 3-1: The theory of planned action

Source: Madden *et al.* (1992:4)

The theory of reasoned action has been criticised on the basis that general attitudes are poor predictors of behaviour in specific situations (Ajzen, 1991:181). To account for this, Ajzen (2005:117-119) developed the theory of planned behaviour, which takes into account perceived behavioural control. The theory of planned behaviour states that generally speaking, “people intend to perform a behaviour when they evaluate it positively, when they experience social pressure to perform it and when they believe that they have the means and opportunities to do so”. If a person believes they do not have control or lack resources, then their intention to perform the behaviour may be low even if they have a favourable attitude and subjective norms on the performance of the behaviour. The theory also assumes that attitudinal considerations, normative considerations and perceived behavioural control are more important for some intentions and less for others. Therefore, for some intentions, only one or two of the factors are needed to explain the intention, while in others, all three factors act as determinants. In addition, the relative weights of the three factors may vary between persons and populations and the actual control a person has in a given situation is not considered but instead the perceived behavioural control in terms of achievement of the person’s goals. This means that perceived behavioural control and intention are not mediated by attitudes and subjective norms and also implies a direct link between perceived behavioural control and behaviour that is not mediated by intentions (Ajzen, 2005:117-119; Madden *et al.*, 1992:4). The theory of planned behaviour is illustrated in Figure 3-2.

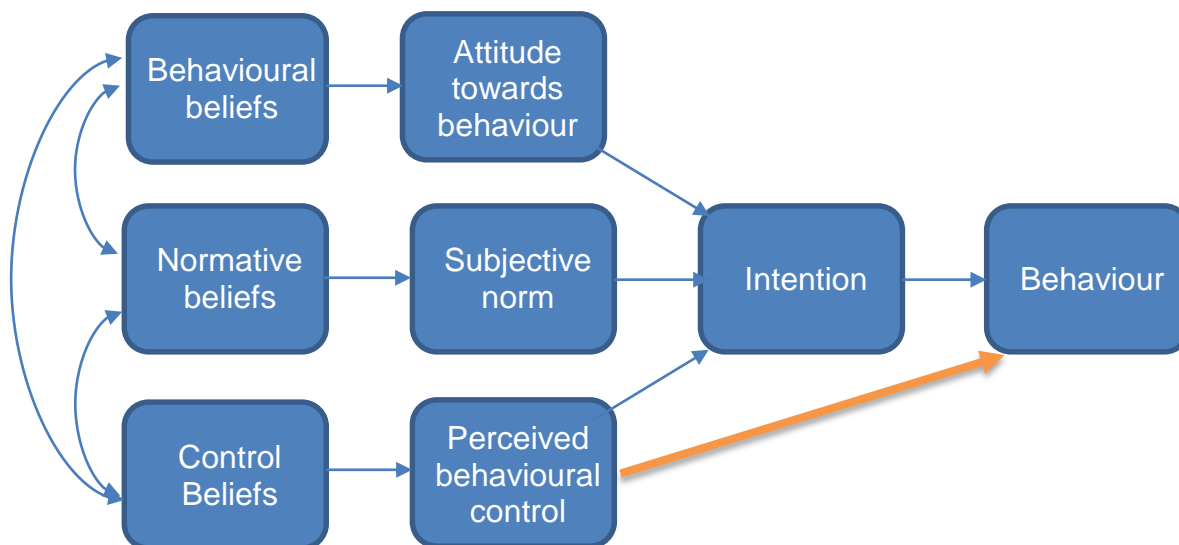


Figure 3-2: The theory of planned behaviour

Source: Ajzen (2005:126)

Both theories have been used to examine consumer financial behaviour. Xiao *et al.* (2011:240) used the theory of planned behaviour to explain risky credit behaviour among students and found that behavioural intention is the most important factor in preventing risky credit behaviour and debt accumulation. Chudry *et al.* (2011:140) also used the theory of planned behaviour but found that the participants lacked control over their borrowing and debt and also that involvement and cognitive style function as potential predictors of behaviour.

The theories of planned behaviour and reasoned action were not the only theories used to examine student debt attitudes. Most notably, Xiao *et al.* (1995) and Davies and Lea (1995) developed alternative models to measure students' attitude towards debt. Xiao *et al.* (1995:155) constructed an instrument to measure student attitudes towards credit cards using affective, cognitive and behavioural components. They found that comparatively, students had the most favourable attitudes in the affective component, more favourable attitudes in the cognitive component and least favourable attitudes in the behavioural components. Davies and Lea (1995:663; 678) used the life cycle theory and determined that student debt increases prior to the increased tolerance in debt older students display. They also found that students from prosperous backgrounds were more inclined to take on debt. This is consistent with the life cycle theory, in that they are more

tolerant of debt based on the expectation of higher future income and reluctance to lower the lifestyles to which they are accustomed. A significant part of the study was that as students accrue more debt, their tolerance increased and their attitude towards debt became more positive.

According to Kidwell *et al.* (2003:1245), the effect of other constructs on intention and behaviour are mediated through attitude, as described in the constructs of the theory of reasoned action and the theory of planned behaviour. This study examined the various attitudes or constructs that will determine attitude towards credit and so influence credit usage intentions. Previous studies have shown that various constructs, such as social comparison, status consumption and impulsiveness have an influence on attitude towards credit (Ponchio & Aranha, 2008:21; Adams & Moore, 2007:101; Fitzmaurice & Comegys, 2006:298; Chien & Devaney, 2001:175; Watson, 1998:203). Attitudes towards material possessions also shape consumers' attitudes towards credit. People who are more materialistic tend to have a positive attitude towards debt and incur more debt (Fitzmaurice & Comegys, 2006:298; Watson, 1998:2003). Materialism has been used successfully to predict the propensity towards debt in previous studies and a favourable attitude toward credit correlates with higher outstanding credit balances. Many authors use materialism to describe a collection of attitudes that describe attitudes towards material possessions, this includes concepts such as a culture of consumption, the drive to acquire possessions, status consumption and social comparison (Ponchio & Aranha, 2008:21; Chien & Devaney, 2001:175). This study examines these attitudes separately using validated scales to determine how each construct will influence Generation Y students' attitude towards credit.

3.5.2 Materialism

Materialism, commonly defined as “the importance a consumer attaches to worldly possessions”, is a well-researched topic and several different definitions and approaches have been used to study materialism (Richins & Dawson, 1990:170). Early research by Csikszentmihalyi and Rochberg-Halton (1978:8) found two types of materialism, namely terminal materialism and instrumental materialism. Terminal materialism is when a possession is an end in itself and there is little interaction between owner and object, the status of owning the object is of primary importance. Instrumental materialism refers to

when objects are used in order “to make life longer, safer, more enjoyable”. Belk (1984:291) produced one of the first validated scales to measure materialism. Later, Richins and Dawson (1992:304) developed the material values scale, which found materialism to be composed of three highly correlated components, namely the importance of acquisition and possessions, judging personal success on the basis of acquisitions and the belief that happiness depends on acquisition. These components are very similar values found in other related scales such as status consumption and social comparison (Cronje *et al.*, 2016:754; Ordabayeva & Chandon, 2010:29).

Owing to this emphasis on material possessions and the belief that acquiring more possessions is essential to happiness, materialism is generally viewed as a negative trait (Segal & Podoshen, 2013:189). Several studies have shown that a negative relationship exists between materialism and well-being (Deckop *et al.*, 2010:1007; Burroughs & Rindfleisch 2002:348; Kasser & Ryan 1993:410). This is because materialistic individuals judge themselves and others based on material possessions, which leads to lower satisfaction with their lives, lower quality of life and lower personal well-being (Tsang *et al.*, 2014:63; Segal & Podoshen, 2013:189). However, Richins and Dawson (1990:170) determined from the outset that since material possessions serve an important role in determining quality of life, that the negative connotation that materialism carries cannot always be justified. This sentiment is echoed by Kharas (2010:7) who argues that materialism provided the impetus in the development of the capitalist market and trade between nations, as well as being the driver for entrepreneurship, human capital accumulation and innovation.

Early research by Belk (1985:266) recognised the link between marketing and materialism. He questioned whether marketing causes materialism or merely contributes to materialism. This led to the study of materialism at the level of the individual consumer to understand the correlation between materialism and various marketing activities, such as advertising (Richins & Dawson, 1992:303). Belk (1985:267) identified the five major fields in the study of materialism as:

- Is materialism necessarily a positive or a negative trait?
- Does marketing create or exacerbate materialism?

- Does materialism, as an essentially egoistic trait, oppose altruism?
- Does materialism negatively influence interpersonal relationships?
- Does materialism contribute to the enhancement and maintenance of a positive self-identity?

Although these questions fall outside of the scope of this study, it does signify the importance of the link between materialism and marketing. More recent research has found a positive correlation between marketing and increased materialism and that external influences may be more important than family influence on the levels of individual materialism. Attitudes towards advertisements have also been found to have a statistically significant link to materialism (Davila *et al.*, 2017:162; Sandhu, 2015:45).

South Africans' spending patterns and levels of indebtedness have been receiving significant attention. A recent study by Duh *et al.* (2014:251) found that South African young adults are more materialistic than young adults from a selected European sample are. This is supported by research that indicates that consumers in developing countries tend to be more materialistic than those in developed countries are and that materialism may originate from both deprivation experiences and cultural influences (Watson, 2015:134; Postel, 2008). People with a lower socioeconomic status or who grow up feeling disadvantaged, escape feelings of inadequacy by embracing materialistic values and goals (Kim *et al.*, 2017:373; Watson, 2015:134). Khare (2014:31) linked overspending and people borrowing money to acquire material possessions to an increase in materialism. Therefore, it may be argued that materialism is contributing to South Africans' indebtedness. Schussler (2011), as well as studies performed by the Human Sciences Research Council (2003), found that debt was increasingly being incurred by lower-income earners. This is not true for everyone though and although some individuals, cultures and countries are thought to be more materialistic, there are great differences between individuals. Some people are content with far less, doing charitable work or even relinquishing all personal possession to enter religious life (Richins & Dawson, 1992:303; Belk, 1985:265). Even in individuals, levels of materialism may vary and change with age, experience and circumstances (Belk, 1985:268).

When people cannot afford to make a purchase, they resort to loans. There is thus a link between materialism, advertising, either for products or for loans and credit use (Sandhu, 2015:45). This is supported by previous studies that found that materialism is an important variable in predicting a consumer's propensity for incurring debt (Ponchio & Aranha, 2008:21). According to Donnelly *et al.* (2013:113; 114; 122), there are several reasons for this. These reasons include materialists do not manage their credit properly; they believe that their purchases will transform their lives and they make purchases for emotional reasons. In theory, people who are more materially inclined should manage their money in such a way as to maximise their buying power, but in reality they tend to borrow more and view borrowing in a more favourable light, save less and spend more and overuse credit cards more frequently. Furthermore, while materialistic individuals tend to worry more about finances than the average consumer does, that worry does not translate into better financial decisions. Materialists also have a higher willingness to use credit, a positive attitude towards debt and willingness to take on higher levels of debt.

Previous studies have found that materialism has a strong and direct influence on young consumers' compulsive spending patterns (Xu, 2008:37). According to research by Richins (2013:14), materialists believe that their acquisition will bring them happiness but that the happiness is short lived as materialists tend to be less happy than others overall and suffer from more fears and worries, which leads them to repeat the purchase process to enjoy the momentary happiness associated with buying. Richins and Chaplin (2015:1349) found that materialism can be introduced by parents to young children by means of material reward and punishment and that personal and social insecurity during childhood are relevant to materialism.

The commonly accepted elements of materialism, including the importance of acquisition and possessions, judging personal success on the basis of acquisitions and the belief that happiness depends on acquisition, lend themselves to be used as a measuring tool of materialism in some ways (Belk, 1984:291). Richins and Dawson (1992:303) developed two independent scales through which materialism levels could be measured and compared. These scales were not the first scales developed to measure materialism but they did not suffer from the critical deficiencies of earlier developed scales, which prevented them from gaining widespread acceptance. These earlier scales often

measured “attitudes towards materialism” and were often not psychometrically assessed or statistically validated (Richins & Dawson, 1992:307). The Belk (1984) materialism scale is based on three identifiable traits based on views prevalent in the materialism literature at the time, namely possessiveness, non-generosity and envy. Belk identified 34 items – nine relating to possessiveness, seven relating to non-generosity and eight relating to envy and combined them into a five-point Likert type scale Belk (1984:291).

Richins and Dawson (1990:170) took another approach based on the notion that individual personality traits are generally developed in a person’s formative years and remain relatively unchanged over time, whereas materialistic tendencies tend to evolve with time and social conditions. They proposed that materialism should be viewed as a value and proposed a value-based materialism scale, claiming that materialism is an attribute, “which changes with social conditions and age” rather than defining characteristics of traits, which, to them, seemed inconsistent with the concept of materialism (Richins & Dawson, 1990:170). Richins and Dawson (1990) developed their material values scale on three key themes, namely acquisition centrality, acquisition as the pursuit of happiness and possession-defined success.

Richins and Dawson’s (1992) scale reduced the material values scale to 18 items – seven related to centrality, five related to happiness and six related to success and this final scale was found to have even better validity and reliability than the Belk (1984) materialism scale. The Richins and Dawson materialism scale developed in 1992 was used in this study.

3.5.3 Status consumption or ‘Keeping up with the Joneses’

Status consumption is “the motivational process by which individuals strive to improve their social standing through the conspicuous consumption of consumer products that confer and symbolise status both for the individual and surrounding significant others” (Eastman *et al.*, 1999:93). Cronje *et al.* (2016:754) explain it as the desire to climb the social status ladder, resulting in consumers using products as status symbols to communicate social and economic standing to others. This may be a conscious or subconscious act and the nature of products consumed will differ between races, cultures, age groups and genders (Chipp *et al.*, 2011:118). Research found that men tend to

engage in status consumption more often in an effort to impress women (Moav & Neeman, 2012:935).

Authors refer to both status consumption and conspicuous consumption and although a subtle difference may exist in the way they are defined by different authors, both the terms have been used interchangeably together with a whole host of other terms that essentially describe the same well-documented and researched phenomenon; the idea that displays of wealth will improve a person's image or social standing (Cronje, *et al.*, 2016:755; Chipp, *et al.*, 2011:118). For the purpose of this study, both status consumption and conspicuous consumption will be used as by the authors referenced, unless the source intended a difference in meaning between the terms.

Research into the phenomena of status consumption started at the end of the 19th century when Veblen (1899:39) realised that the importance a person attaches to image and status may drive consumption and Veblen thus proposed that the "desire of everyone to excel everyone else in the accumulation of goods [where] the end sought by accumulation is to rank high in comparison with the rest of the community in points of pecuniary strength". Veblen (1899) called this conspicuous consumption. Other authors have built on and developed this idea. Eastman *et al.* (1999:93) preferred the term status consumption, while other authors such as Dupor and Liu (2003:423) refer to this phenomenon as "keeping up with the Joneses". According to Grotts and Widner-Johnson (2013:281), status consumption is defined as the "process of gaining status or social prestige from the acquisition and consumption of goods that the individual and significant others perceive to be high in status" and conspicuous consumption "involves expenditures made for purposes of inflating the ego coupled with the ostentatious display of wealth."

Income and possessions not only affect how people see themselves but income also determines how others see them. Hypothetically, rich people are seen as healthy, happy and well-adjusted while seemingly poor people are seen as maladjusted and unhappy (Furnham, 1984:501). To compensate for this, poorer households save less and spend more on conspicuous consumption, despite the fact that lower saving and higher spending are very harmful. This effect becomes more pronounced as inequality increases in society (Ordabayeva & Chandon, 2010:27). Belk (1995:24) indicates that possessions

are viewed as an extension of the self and key in improving an individual's social image, helping to overcome feelings of anxiety and inferiority. Nga *et al.* (2011:244) found that individuals who lack in self-esteem often compensate by seeking social approval by following the latest trends in fashion and lifestyle. It is often "fear of failure and loss of self-respect" that compels both low- and high-income consumers to incur debt to finance a lifestyle that will command the respect of their community and peers (Chipp *et al.*, 2011:130).

Attaining a higher social status has become an important behavioural motivator and these status and prestige considerations are important antecedents of consumer buying behaviour (Kim & Jang, 2013:39). Therefore, the expectations that the media create play an important part in marketing a product (Goldsmith *et al.*, 2010:324). Pritchard (2013) suggests that the influence of advertising started with the development of mass media at the end of the 19th century and sparked the race between commercial organisations with their advertisements for products that would help people catch up with the 'Joneses'. Richins (1987:352) claims that advertisements link products to images of happy people, bolstering the commonly held view that consumption is necessary for enjoying life. Advertising thus instils a sense of inadequacy and reinforces a preoccupation with physical attractiveness, which, in turn, encourages the sales of certain products to enhance their image (Martin & Kennedy, 1993:513). Leguizamon (2016:307) indicates that it is middle class consumers in particular who indulge in conspicuous consumption of goods targeted at the wealthy to signal high status.

Cronje *et al.* (2016:754) examined status consumption of clothing brands in South Africa. They found that lower income consumers tend to buy status-conferring goods that reflect a desired social status and that will elicit positive responses from others. Higher income earners' status consumption is driven by the belief that high priced products equate to good taste, uniqueness and sophistication, thus earning respect from others but without relying on the approval of others.

Members of Generation Y have been socialised in a materialistic society and have consequently developed an identity that strongly links self-esteem and public self-consciousness to displays of wealth. As such, Generation Y has the highest motivation to consume for status when compared to Generation X and Baby Boomer consumers

who preceded them. This drives the status consumption tendencies of Generation Y even though they still rely on parents for financial support and this easy money from parents has, in turn, led to an increase in frivolous spending, more so than would be possible with a regular income (Butcher *et al.*, 2017:676; Kim & Jang, 2013:40).

There are several relevant factors to consider when examining status consumption in South Africa. Chipp *et al.* (2011:130) propose that “fear of failure and loss of self-respect” compels both low- and high-income South African consumers to incur debt to finance a lifestyle that will command the respect of their community and peers. Research by Eastman and Iyer (2012:90) indicates a significant negative relationship between a consumer's cognitive age and the motivation to consume for status and that younger consumers, such as students, are more likely to be status consumers. Seen together with the research that indicates a high propensity towards conspicuous consumption among the poor and in emerging economies and among people who come from economically deprived conditions, this may provide insight into the spending habits of South African students who are often from poor backgrounds (Cronje *et al.*, 2016:754; Postel, 2008). Ordabayeva and Chandon (2010:48) explain that “consumers at the bottom of the distribution spend a larger proportion of their budget on status-conferring consumption in order to reduce the dissatisfaction they feel with their current level of possessions due to the widening gap between what they have and what others have”. Research found that status consumption is often irrational in its expression and motivation, as opposed to the idea of rational consumers held by economists (Shukla 2008a:25; Finn; 1992:658). This is important since evidence shows that low savings and high conspicuous consumption are most harmful to low-income households (Ordabayeva & Chandon, 2010:48).

Eastman *et al.* (1999:41) developed a scale to measure “the tendency to purchase goods and services for the status or social prestige that they confer on their owners” or status consumption. They used items from Rosenberg's self-esteem scale, Belk's materialism scale, Berkowitz and Lutterman's social responsibility scale and Kaufman's status concern scale. After completing six studies, a five item scale was developed that was distinct from materialism and had a Pearson correlation of 0.49 ($p < 0.001$), which indicates a moderate positive correlation between status consumption and materialism. Eastman and Liu (2012:93) later adapted this earlier scale to measure and compare levels of status

consumption among Baby Boomers, Generation X and Generation Y. The Eastman and Liu (2012) status consumption scale was used in this study.

3.5.4 Money as a motivator

The love of money is said to be the root of all evil (Fatoki, 2015:6632). Freud compared money to faeces; Klein said it equated a longing for an inexhaustible motherly breast and Abraham that it related to separation anxiety. Fenichel said wealth is a drive for power and respect, while Adler said the need to hoard money comes from feelings of inferiority (Yamauchi & Templer, 1982:522). Not every person shares these sentiments though. People have different attitudes towards money, which determines how they perceive, value and treat money. These attitudes may be formed through education, experience and habits (Engelberg & Sjoberg, 2006:2027). They begin in childhood, remain in adulthood and influence later-life money-related behaviours (Duh, 2016:134). Emotional versus logical attitudes towards money and spending will determine spending patterns, credit use and buyer's remorse (Adams & Moore, 2007:101). Burgess (2007:682) defines money attitude as "interpersonal, attitudinal beliefs that express values concerned with money and are evaluated in importance in order to guide behaviour within the context of money and money situations".

For many, money is both a tool and a drug. As a tool, it can be used to obtain things needed to satisfy wants and needs - people are interested in money because of what it can buy. As a drug, it becomes an insatiable motivator, which may lead to gambling, workaholism and unethical behaviour (Fatoki, 2015:6633). Consequently, how individuals feel about money will determine if money will influence their behaviour and motivate them to action. People driven by passion or enjoyment for its own reward are said to be intrinsically motivated. Other people who are motivated to action to attain a desired consequence or to avoid punishment are said to be externally motivated. For some, money-based rewards are considered a powerful external motivator (Monteiro *et al.*, 2015:14). This may be due to moneys' perceived instrumentality to access desired results such as security, freedom, prestige or power (Lea & Webley, 2006; Engelberg & Sjoberg, 2006:2028). Money is also seen by many as a sign of success and thus also a reflection of their work ethic (Kirkcaldy & Furnham, 1993:1079). Some companies use this understanding of money as a motivating force to reinforce desired behaviour, attract,

retain and motivate employees with financial incentives (Lohman *et al.*, 2018:184; Tang & Chiu, 2003:14).

Money attitudes are independent from income, although people with higher money attitude scores expect higher pay compared to those with lower scores (Hayhoe *et al.*, 2005:5; Furnham, 1984:502). Research indicates a relationship between money motives and lower well-being and that people in richer nations attach less value to money (Engelberg & Sjoberg, 2006:2029). Phau and Woo (2008:540) investigated money attitudes and came to the conclusion that people who view money as a source of power and prestige were also more likely to be compulsive buyers and also more likely to buy on credit. Other researchers also came to similar conclusions and found that people who scored higher on a money attitude scale were also more likely to have credit card debt and also more likely to be compulsive shoppers (Robb & Sharpe, 2009:26; Harnish *et al.*, 2018:190). Duh (2016:138) found that South African Generation Y students who enjoyed fewer family resources were more likely to develop affective money attitudes later on, which may be linked to materialism and also harmful credit use. Research in South Africa also found that business students have a higher love of money than non-business students do and that female students scored higher on money as motivation (Fatoki, 2015:6637).

Studies to determine people's attitude towards money have proven popular and several scales have been developed over the last few decades. Yamauchi and Templer (1982:522) found that although other behaviours have been researched, little information on money behaviour was available in the 1980s. From the literature, Yamauchi and Templer identified certain common elements, namely power-prestige, retention-time, distrust, quality and anxiety and they used these elements to construct the money attitude scale as the first standardised instrument to measure people's attitudes towards money. Furnham (1984) then developed the money belief and behaviour scale (MBBS) to include the possible influence of demographic variables (age, gender and variables related to income). Furnham found six distinctive attitudes towards money, namely obsession, power/spending, retention, security/conservative, inadequacy and effort/ability. Next, Forman (1987) developed the money sanity scale (MSS), which lists five money profiles, namely miser, spendthrift, tycoon, bargain hunter and gambler. Shortly afterwards,

Gurney (1988) used personality traits to create the MoneyMax profile using 13 traits. These include involvement, pride, emotionality, altruism and anxiety, among others. Since money is such an important and emotional subject, researchers continue to develop new scales. Tang and Chiu (2003) developed the love of money (LOM) scale and Funfgeld and Wang (2009) conducted research on “self-stated financial attitudes and behaviour”, which indicated five attitude factors, namely anxiety, interest in financial issues, intuitive decisions, need for precautionary saving and free-spending. Researchers also improve on existing scales as the body of knowledge grows. For example, Luna-Arocas and Tang (2004:330) sought to improve on the Tang and Chiu (2003) love of money (LOM) scale. Monteiro *et al.* (2015:20) then used exploratory factor analysis to develop a new construct based on The Luna-Arocas and Tang (2004) scale, which they used to determine if money acted as a motivator among young workers. This study used the motivator construct developed by Monteiro *et al.* (2015) to see if money was a motivating factor for Generation Y students.

3.5.5 Impulsive buying

Rook and Fisher (1995:306) define impulsive buying as “a consumer’s tendency to buy spontaneously, unreflectively, immediately and kinetically”. Impulsive buyers are more receptive to spontaneous buying stimuli and their shopping lists are open to sudden, unexpected buying ideas that promise immediate gratification. It is an instant, unplanned purchase of something a consumer had no intention of purchasing (Prajapati & Rathod, 2013:128). Verplanken and Herabadi (2001:72) argue that the core elements of impulsive buying include a lack of planning and an emotional response, such as pleasure or excitement, to the unplanned purchase. Up to 90 percent of shoppers occasionally make impulsive purchases and up to 50 percent do so frequently (Wang & Xiao, 2009:4).

Research has identified four distinct types of impulse buying, namely pure, reminder, suggestion and planned impulse buying. Pure impulse buying is a spontaneous purchase with which a consumer breaks from their normal patterns. Reminder impulse purchasing occurs when the consumer is reminded of the need to buy an item upon encountering it. Suggestion impulse purchasing is the purchase of a new product without any prior experience based solely on self-suggestion. Planned impulse buying is partially planned and occurs when a consumer intends on buying a product but has not yet decided on the

specific product or brand. The three important traits that correlate with impulse buying are impulsiveness, optimum stimulation level and self-monitoring. Outside stimulation increases stimulation levels and increases impulsive behaviour, while self-monitoring will negate impulsive behaviour (Wang & Chen, 2015:186).

Impulsive and compulsive behaviour is closely related but an important distinction does exist in the literature. Compulsive buying is medically defined as an impulse control disorder, a mental disorder characterised by irresistible impulses to engage in harmful or senseless behaviours in order to counteract negative emotional situations such as depression and loneliness (Palan *et al.*, 2011:82). Impulsive buying involves a specific product at a particular moment and is temporary, while compulsive buying is an enduring behaviour that centres on the buying process rather than a particular product (Park & Burns, 2005:136).

People with self-esteem issues, who feel anxious, guilty and unhappy, are more likely to succumb to impulse buying, especially in response to stimuli such as advertisements (Kim, 2014:652; Xu, 2008:41). Materialism is an important antecedent of impulsive buying and affects how much is spent on impulsive purchases and how often people engage in impulsive buying (Richins, 2013:3). This is because materialistic people are likely to exhibit higher levels of impulsivity and self-control failure, which leads to an inability to delay gratification (Kim, 2013:759; 760). Impulsive shoppers are more likely to use credit to fund their purchases, as payment is only expected at a later date (Wang & Xiao, 2009:4). As such, credit makes impulsive buying easier since shoppers can now buy items on credit even if they do not have sufficient cash available (Palan *et al.*, 2011:90).

Younger consumers are less experienced and knowledgeable about personal finance and, consequently, more given to impulsive spending (Pinto *et al.*, 2000:644). Recent studies in neuroscience found a lack of impulse control related to inadequate maturing of the brain during adolescence. This makes peer influences an important contributor to youth impulsive behaviour such as binge drinking and shopping behaviour (Moschis, 2017:1386; 1394). According to research by Luo (2004:431), a reference group comprising close friends has a greater influence on consumers' impulse buying behaviour than a family reference group. While both men and women engage in impulsive buying, Generation Y females are more likely to engage in impulsive buying behaviour than

Generation Y males (Bae & Miller, 2009:43). Men's impulsive purchases tend towards functional, instrumental and leisure items that promote independence and activity. Women's impulsive purchases tend to be more symbolic and self-expressive goods (Segal & Podoshen, 2013:190).

Impulsive behaviour has long been associated with negative traits such as foolishness, lower intelligence and even criminality. Impulsive buying is thought to be motivated by lack of self-control, hedonism and a disregard for the consequences, even when people are aware of them (Wang & Xiao, 2009:4). Low self-control is also associated with impulsivity, desire for immediate gratification, risk seeking, self-centeredness and a quick temper, all of which are linked to irresponsible credit behaviour (Adams & Moore, 2007:101). This view is one sided, however, impulsive behaviour can also include positive behaviours such as spontaneous generosity or practical decisions such as purchasing two-for-one specials (Rook & Fisher, 1995:305).

Impulsive buying increases the number of items purchased by existing customers, as well as attracting new customers (Dawson & Kim, 2009:23). This is, of course, dependent on the funds and time customers have available (Bhatt & Pandya, 2015:1782; Muruganantham & Bhakat, 2013:156). Retailers often try to entice consumers into impulsive purchases by using promotions to trigger a need and a buying impulse in shoppers (Dholakia, 2000:9771). More impulsive shoppers are also more likely to be stimulated by non-monetary promotions such as attractive containers or displays (Laroche *et al.*, 2003:514). External factors such as in-store atmosphere, browsing, layout, salespeople and promotions and internal factors such as moods and emotions prompt impulse buying behaviour (Muruganantham & Bhakat, 2013:152; Cho *et al.*, 2014: 39; Schiffman *et al.*, 2010:36). Research has shown that impulsive buying may elevate the mood of the shopper, but as they often buy beyond their needs and means, in the long-term impulse control will do more to improve an individual's psychological well-being (Pradipto *et al.*, 2016:180). Richins (2011:141) found that financial literacy helps consumers make better credit decisions and slows down impulsive buying. People with better self-control are also less likely to engage in impulsive spending and more likely to save money (Norvilitis *et al.*, 2006:1399).

Rook and Fisher (1995:307) used the literature available at the time to generate 35 items that were then tested among undergraduate business students. Using exploratory factor analysis, they were able to narrow this down to nine items to develop the impulsive buying behaviour scale. This scale was used in this study to determine if Generation Y students indulge in impulsive buying.

3.5.6 Social comparison

Social Comparison is “a tendency to compare one’s own status to that of others in determining whether or not one has enough” (Norvilitis & Mao, 2013:391). Ordabayeva and Chandon (2010:29) explain people compare themselves to others to measure how well they are doing. Comparisons can be upward (unfavourable) or downward (favourable) comparisons. Upward (unfavourable) comparisons occur faster and cause the feelings of envy and inferiority often associated with social comparisons. This may motivate people to attain and display the same level of possessions as those people that they view as better off.

The social comparison theory was pioneered in the 1950s by Festinger (1954:117) who proposed that we evaluate ourselves by comparing ourselves to others. Festinger (1954:117) theorised that people need to evaluate their opinions and abilities and because it is difficult to do so objectively, this is done through social comparison with other people, where such social comparisons will, when possible, be made with peers.

Research has revealed that people do not only evaluate their own opinions and abilities but they also evaluate their possessions, outward appearances, values, attitudes and behaviour (Tiggemann *et al.*, 2018:91; Yoon *et al.*, 2016:801; 802).

Chae (2017:371) states that the process of social comparison is a relatively automatic process, although individual differences exist in social comparison orientation. Those who have a strong orientation for social comparison have three characteristics in common. First, they have a high chronic activation of the self or a high level of public and private self-consciousness. Secondly, they are socially oriented, manifesting in their sensitivity to others’ needs and feelings and thirdly, they tend to suffer from uncertainty, often have low self-esteem and high neuroticism (Yang, 2016:704).

Although social comparison can be detrimental to the individual, it may however also make an important positive contribution to society. People compare their values and behaviours to their peers and then adjust them accordingly. This may reinforce positive behaviour, such as healthy diets, exercise and environmentally-responsible behaviour and deter behaviour society sees as unacceptable (Goldstein *et al.*, 2008:479; Yun & Silk, 2011:278). It also influences consumer behaviour and plays a role in normalising debt as households with debts are more likely than those without to believe that the majority of their own peers consider having debt to be normal (Pattarin & Cosma, 2012:115). This may be one of the reasons people who are more inclined to social comparison tend to have higher levels of debt and lower levels of financial well-being (Norvilitis & Mao, 2013:396)

As mentioned previously, people tend to seek out others who are similar to themselves for comparison making and social media provides an unlimited tool for social comparison given the instantaneous and widespread access to photographs. The number of 'likes' people receive on social media posts often serve as a mechanism for social comparison. Therefore, people generally only share what they want others to see and this means that social media presents a distorted picture for comparison. Paradoxically, people who are already anxious about their image seem to be more likely to seek out images of upward (unfavourable) social comparison on social media, reinforcing their feelings of dissatisfaction (Tiggemann *et al.*, 2018:91; Fox & Vendemia, 2016:594). People portray their lives in a positive light and social people post their experiences on social media more often, while people who are less social share less, which gives an unbalanced view (Deri *et al.*, 2017:859). In addition, the images people share are often edited and enhanced, which presents an unrealistic ideal for those who are engaging in social comparison (Chae, 2017:371). Both narcissistic people and those with a low self-esteem are more likely to generate self-promotional content and misrepresent their lives on social media. Narcissistic people engage in downward social comparison to maintain their inflated egos, while people with low self-esteem engage in upward comparisons to find ways for self-improvement (Chae, 2017:372; Fox & Vendemia, 2016:594).

Since people present their ideal-self and not their actual-self, social media comparisons are most often negative and cause feelings of inadequacy and envy (Ozimek *et al.*,

2018:170; Yang, 2016:704). Consumers compare themselves with other people to determine if they are keeping up with their peers and to signal that they belong and such social comparisons can lead to status-driven expenditures. Individuals share their experiences on social media, which then triggers a competitive drive for status-driven expenditures in others who view their social media feeds (Kim & Jang, 2017:158).

Upward social comparisons are positively associated with materialistic aspirations (Kim *et al.*, 2017:373; Chan & Prendergast, 2007:213; Richins, 1991:71). Such upward social comparisons may cause dissatisfaction, even when the person is objectively well off; thereby, affecting emotional well-being. This leads the materialistic consumer to fall into an aspirations trap where larger and more frequent purchases become necessary to satisfy the individual's competitive appetite through acquisitions (Nagpaul & Pang, 2017a:12). Social comparisons are also likely to lead people who have a low self-esteem to fear negative evaluation, which may lead to overspending (Nagpaul & Pang, 2017b:611). People who compare themselves with others who have more economic resources than they have and desire or feel entitled to, also frequently outspend their income (Lea *et al.*, 1995:683). Eastman and Liu (2012:99) found that potential buyers, who make comparisons with others to gauge the success of the product in increasing their status level, may occur more frequently amongst members of Generation Y cohort.

Not only material possessions cause feelings of dissatisfaction. People often feel driven by pressure from peers and media to adhere to, often unrealistic, societal beauty standards, which have been linked to body dissatisfaction and eating disorders (Fox & Vendemia, 2016:594). As such, the media and advertising have long been blamed for presenting unrealistic images and expectations, leading people to compare their own performance and attractiveness to that of idealised images in the media and advertisements, which lowers the viewer's satisfaction with their own image (Richins, 1991:71). This very often leads young consumers to imitate celebrities through consumption (Goldsmith & Clark, 2012:44).

Social comparison partly determines individual susceptibility to peer pressure and the predisposition to conform, especially when people have low self-esteem and are more sensitive to social pressure to avoid disapproval. Self-confident people are less

concerned about the opinions of others and thus more likely make rational decisions rather than follow descriptive norms (Yoon *et al.*, 2016:802).

Kim *et al.* (2017:388) found a positive correlation between social comparison, personal relative deprivation, materialism and spending preferences. People who are objectively affluent become more materialistic when exposed to unfavourable social comparisons. Social comparison, like personal relative deprivation, is independent of income and satisfaction decreases the more often people make upward (unfavourable) comparisons, regardless if they earn high levels of income themselves (Peng, 2007:224). Personal relative deprivation refers to the dissatisfaction and resentment a person feels when he or she sees others enjoying outcomes they desire and feel that they are entitled to (Kim *et al.*, 2017:374). Relative deprivation is determined by perceptions of inequality, the cognitive element and feelings of dissatisfaction, the emotional element. When these comparisons are made between groups instead of individuals, such comparisons are often the basis for social change. Researchers have also found a link between personal relative deprivation and social comparison in South Africa (Appelgryn & Bornman, 1996:381). This may be explained in part by South Africa having one of the highest Gini coefficients in the world, calculated to be between 0.660 and 0.696. The Gini coefficient measures income inequality, with zero being a perfectly equal society and one representing a perfectly unequal society (Bhorat, 2015). South Africa is also plagued by very high crime rates (Fourie, 2018). This is important because research has found a correlation between crime rates and inequality (Costantini *et al.*, 2018:568; Enamorado *et al.*, 2016:137), with one theory being that comparisons that highlight inequality heighten feelings of relative deprivation, which translates into criminal behaviour (Hicks & Hicksy, 2014:1091).

The financial self-comparison scale used in this study was created by Norvilitis and Mao (2013:398), as an addition to the Iowa-Netherlands comparison orientation measure developed by Gibbons and Monk in 1999. Norvilitis and Mao (2013:398) found that the reliability of the scale differed based on the nationality of the participants. American studies had a higher reliability using nine items, while Chinese participants had higher reliability using only six items.

3.5.7 Attitude towards credit

Credit use is often rational and pragmatic as consumers seek to maximise the utilities generated from money. However, this is not always the case as various other factors also play a role in shaping consumer behaviour and attitude towards credit. These include emotional factors such as status and prestige considerations, financial attitudes such as unrealistic optimism, level of financial knowledge, debt tolerance and psychological constructs like locus of control and cognitive dissonance (Kennedy, 2013:7; Kim & Jang, 2013:39; Finn, 1992:658; Forman, 1987:2028). Research has found that the number of credit accounts people hold, the frequency of credit use and repayment decisions will be determined not only by individual economic circumstances, such as income, but also by attitude towards credit (McHugh & Ranyard, 2012; Chan *et al.*, 2012:126; Xiao *et al.*, 1997:32). These attitudes towards money and debt are generally shaped during a person's formative years. Lifestyle, upbringing and family structure all play a role in young people's attitudes towards money and possession (Rindfleisch *et al.*, 1997:320; Kirkcaldy & Furnham, 1993:1079). Parents provide financially for the majority of students and allow them to lead a lifestyle they cannot afford on their own. It is often not until they start working that Generation Y starts taking any responsibility for their personal finances (Kim & Jang, 2017:156; Borden *et al.*, 2008:24).

Where credit was once frowned upon, by the 1980s, children were growing up in an environment where 'charge it' was the consumer motto. This helped foster a charge now, pay later attitude among them (Braunsberger *et al.*, 2005:237). As such, a culture of consumption also led Generation Y to be more materialistic than previous generations and under greater social pressure to consume, which leads them to finance their consumption through debt rather than savings (Leclerc, 2012:149; Finney *et al.*, 2007:34; 35; Bakewell & Mitchell, 2003:95-98).

One rationale for this is found in the life cycle theory. According to the life cycle theory, credit use may sometimes be a function of expected future income and not proportional to the limits of current income. Students attempt to maintain the lifestyle they grew up with using credit. Therefore, they are willing to sacrifice future earning to finance present spending to increase their standard of living to conform to their expectations. They believe that they will be able to repay this spending with higher expected future earnings. This

normalises debt and fosters a positive attitude towards debt. This is even more common in consumers with a higher “subjective discount rate”, which means that they consider future costs and benefits as less valuable than present benefits and thus have a more positive view on using credit to finance spending (Hurwitz & Luiz, 2007:110; 130; Davies & Lea, 1995:663). The higher expected future earnings of students are also attractive to credit providers and they are eager to provide credit to students in order to build brand loyalty early on (Nga *et al.*, 2011:245; Mansfield & Warwick, 2000:617).

Financial literacy also influences attitude towards credit. Financial literacy is the skills and knowledge needed to effectively manage information and make decisions with an understanding of the financial consequences of that decision (Cude *et al.*, 2006:103). Consumers need to be financial literate to choose among different credit instruments as well as to avoid predatory lenders. Research has found that there is a strong relationship between financial literacy, financial experience and debt load. Individuals with lower financial literacy also often choose to transact in a high-cost manner (Jappelli, 2009:433). People who lack financial understanding also often choose to make more use of credit, even if it is to their detriment (Boon *et al.*, 2011:151; Sabri *et al.*, 2012:156). The inverse also seems true and research shows that people with more financial understanding are more likely to reject credit solicitations (Norvilitis & MacLean, 2010:56). Owing to the historical financial exclusion of many South Africans, many still lack the knowledge and experience to make prudent financial decisions and this leaves them vulnerable to exploitation and unethical marketing (Rampersad & Reddy, 2012:7407). A study done to determine and compare the financial literacy of different countries rated South Africa as having the lowest financial literacy rate in the world (Jappelli, 2009:436). A more recent student shows that financial literacy levels have increased slightly to a level where South Africa is now on par with levels found in some developed nations and ahead of some developing nations (Moodley, 2017).

Gender also plays a part in attitude towards credit as well as actual credit use. Research into demographic differences found that men associate money with achievement, power and freedom more than women, who often see money as a source of anxiety (Lay & Furnham, 2018:2). Past studies have found that women generally have lower levels of financial literacy than men, have a lower debt tolerance and are also more risk averse

than men (George *et al.*, 2018:4; Agnew & Harrison, 2015:122). Research in South Africa found that more often men find themselves over-indebted (Ndlendle, 2017).

There were two scales that were developed during the 1990s to measure how attitude affects credit use. Xiao *et al.* (1995:158) developed the first. They started with 78 statements divided into the three categories of affective, cognitive and behavioural attitude. The items were tested and retested until 37 remained, 15 affective, 10 cognitive and 12 in the behavioural attitude sub-scale. At the same time, Davies and Lea (1995:671) were working on a longitudinal scale to determine student attitudes towards student debt. Davies and Lea started with 32 statements and then reduced these to 14. Their results showed that there were significant positive correlations between debt and expenditure, debt and attitude and expenditure and attitude. Both studies found that their participants had positive attitudes towards debt and that demographics had an impact on attitudes. Items from both of these scales were used after they were tested for reliability, validity and whether they fit into one factor.

3.6 PROPOSED MODEL OF THE ATTITUDES THAT DETERMINE CREDIT USAGE INTENTIONS

Chapter 2 examined the actual credit use, both globally and in South Africa. There are several reasons why people chose to use credit to pay for products and services. Some of the reasons are practical and rational, while others are emotional and determined by attitude. Chapter 3 discusses the psychological tendencies that are thought to influence attitude towards credit use and so determine credit usage intentions. In Figure 3-3, a model is proposed to illustrate those psychological tendencies that will in part determine credit usage intentions among South African Generation Y students.

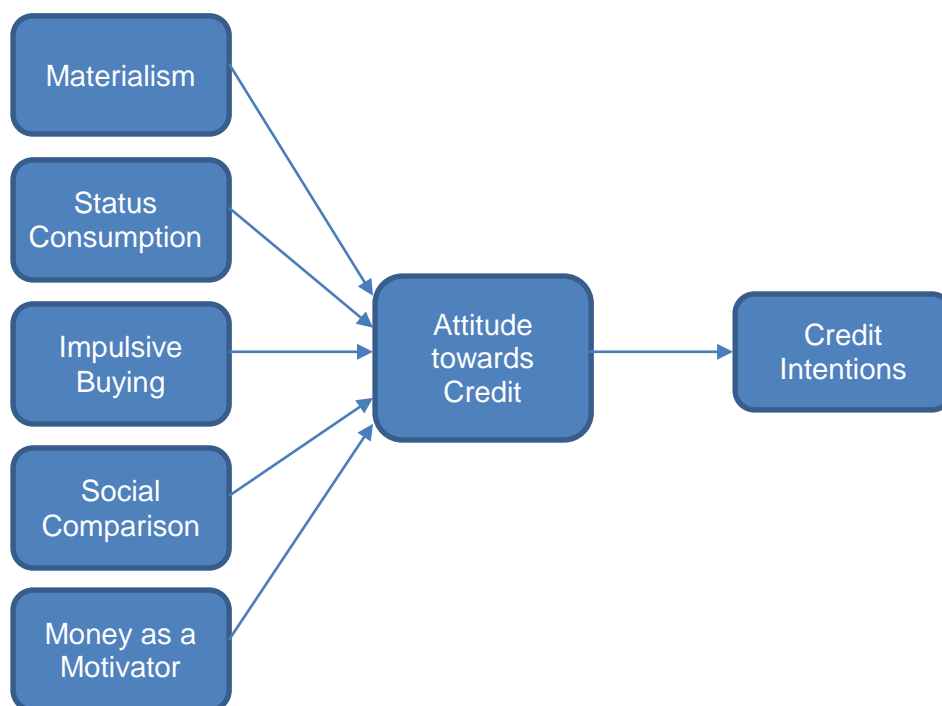


Figure 3-3: Proposed model that determine credit usage intentions

According to the hypotheses in Chapter 1, this model proposes that materialism, status consumption, social comparison, impulsive buying and money as a motivator will determine attitude towards credit, which, in turn, will influence credit usage intentions.

3.7 CONCLUSION

Consumers worldwide have developed a more positive attitude towards credit use over the last century and the youth of today have grown up in households where being in debt is normal. This is largely explained by the life cycle theory that states that consumers will make spending and saving decisions to achieve the preferred distribution of consumption over the life cycle. Younger consumers will borrow money to buy assets and subsidise a lifestyle that is in line with their future earnings expectations, while older consumers first repay debt and then start saving for retirement. Consumers are willing to sacrifice future earnings to gain instant gratification. As such, credit has played an undeniable role in improving the quality of life for many consumers and consumer credit is believed to be a major driver of economic growth. Not all consumers make rational decisions though and many become over-indebted and are unable to repay their debt. There are several reasons for this. Economic conditions and unemployment play a role and many people

use credit to buy necessities. Others do not realise the consequence of their overspending due to the abstract nature of credit; that is, they simply do not understand how much they will eventually have to repay. Marketing also plays a role. Consumers are bombarded with credit offerings from banks and retailers. Although the government, through the NCA, has tried to curtail unethical lending practises and lending to over-indebted consumers, it is still a prevalent practice. Internal factor such as emotions and attitudes undoubtedly also plays a major role. People buy products because it makes them feel better (materialism) or to create a favourable impression among their peers (status consumption). Others compare their own lives to those of others and then use credit to buy products they see others have and that they desire (social comparison) or buy on impulse because of outside stimuli (impulsive buying). Many consumers are over-indebted. For consumer credit to play a positive role and not the destructive role it has played in many consumers lives a greater understanding of the internal causes of credit use will help researchers and marketers move towards sustainable credit use.

The research methodology followed in this study is discussed in Chapter 4.

CHAPTER 4

RESEARCH METHODOLOGY

4

4.1 INTRODUCTION

This chapter contains a discussion on the research methodology used for the empirical research in this study. Marketing research is “the management process responsible for identifying, anticipating and satisfying customer requirements profitably”, according to the United Kingdom Chartered Institute of Marketing (Bradley, 2010:4). It is a systematic and objective process of planning, gathering, analysing and reporting data, which can be used to identify and define opportunities and problems as well as evaluate marketing options and monitor performance (Cant *et al.*, 2008:3).

The marketing research process is illustrated in Figure 4-1.

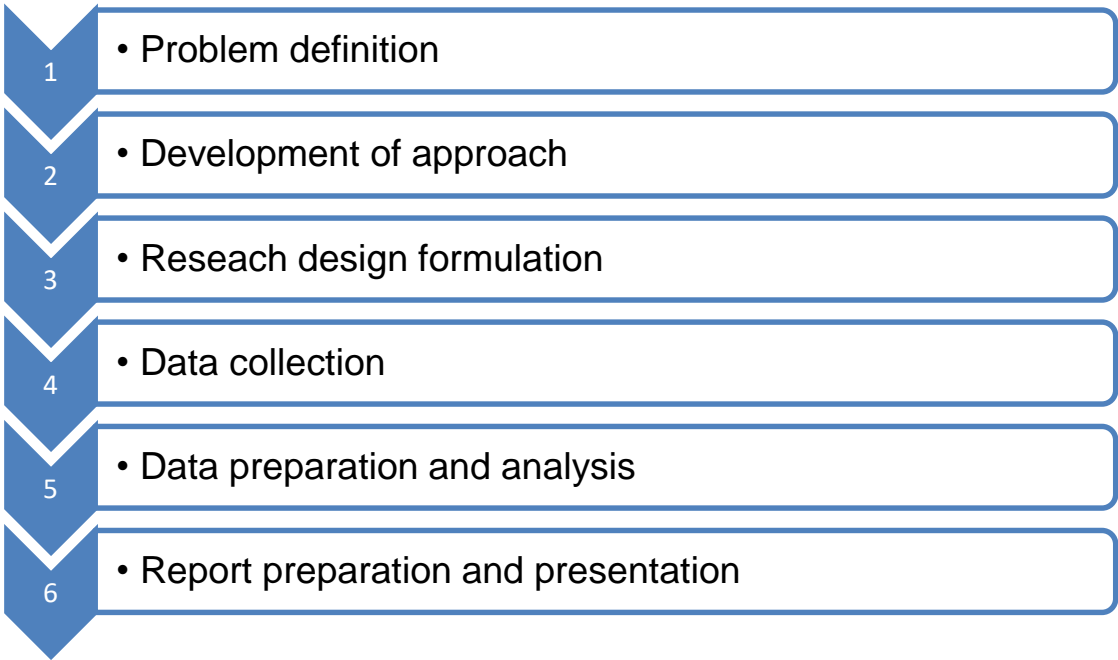


Figure 4-1: Marketing research process

Source: Malhotra (2018:704)

This chapter is a rationale for the methodology used to achieve the empirical objectives of this study. It describes the methods used to collect information, explains why those methods were selected, as well as provides the parameters of the study. This includes the design and administration of the questionnaire, as well as the method of interpretation for the information gleaned from it.

The research design is discussed in Section 4.2. In Section 4.3, the sampling strategy is described followed by the description of the measuring instrument in Section 4.4. The process of administering the questionnaire is described in Section 4.5. Thereafter, the data preparation is discussed in Section 4.6 and the statistical analysis techniques used in the study are described in Section 4.7.

4.2 RESEARCH DESIGN

The research design is the framework that guides the research project and specifies the methods and procedures used to collect and analyse the relevant information. Research designs can be either exploratory research or conclusive research and conclusive research can be divided into causal research and descriptive research (Malhotra, 2018:66; Nargundkar, 2008:39; Shukla 2008b:29).

Exploratory research attempts to shed light on an area to provide a greater understanding of the problem or opportunity (Bradley, 2010:38). The questions are mostly open-ended and the benefits are that it is fast, economic, provides rich data, accurately records market behaviour and provides preliminary insights that often lead to ideas, which can be defined and measured quantitatively (Shukla, 2008b:20; 32). Exploratory research is usually qualitative and data are collected from a small number of respondents who are interviewed or observed (Kent, 2007:17).

Conclusive research is deductive in nature and produces findings that are used in reaching conclusions and making decisions, which necessitates that the research objectives and data requirements be clearly defined. The conclusive research design usually involves quantitative methods of data collection and data analysis and provides a way to verify and quantify findings of exploratory studies (Nargundkar, 2008:39). Conclusive research is either causal or descriptive. Causal research is used to determine the reason why certain market phenomena occur (Shukla, 2008b:46). Causal research

examines the cause and effect relationship between variables by manipulating one or more of those variables and then measuring the effect on the dependent variable (Malhotra, 2018:66; Hair *et al.*, 2013:37).

Descriptive research is a form of conclusive research used to describe market situations and characteristics, estimate the prevalence of behaviour, attitudes, beliefs or opinions, determine perceptions and associations between variables and make predictions rather than explaining the causes of such situations or opinions (Malhotra, 2018:70; Bradley, 2010:510). Descriptive research can be longitudinal, in which more than one measure is taken from a fixed population in the sample to measure changes over time, or cross-sectional. In cross-sectional research, measures are taken only once (Shukla, 2008b: 42). Cross-sectional research is divided into single cross-sectional designs, in which information is obtained for a sample once and multiple cross-sectional designs, in which information is obtained from two or more samples but also only once (Malhotra, 2018:71). A descriptive research design utilising a single cross-sectional approach was used in this study.

4.3 SAMPLING STRATEGY

This section contains the description of the target population, sampling frame, sampling method and sample size. Sampling is the process whereby the required data are obtained from a sample of the target population. The sample characteristics are then used to draw conclusions about the target population based on the observation of a portion of that population (Zikmund & Babin, 2013:63; 312).

The sampling design process is illustrated in Figure 4-2.

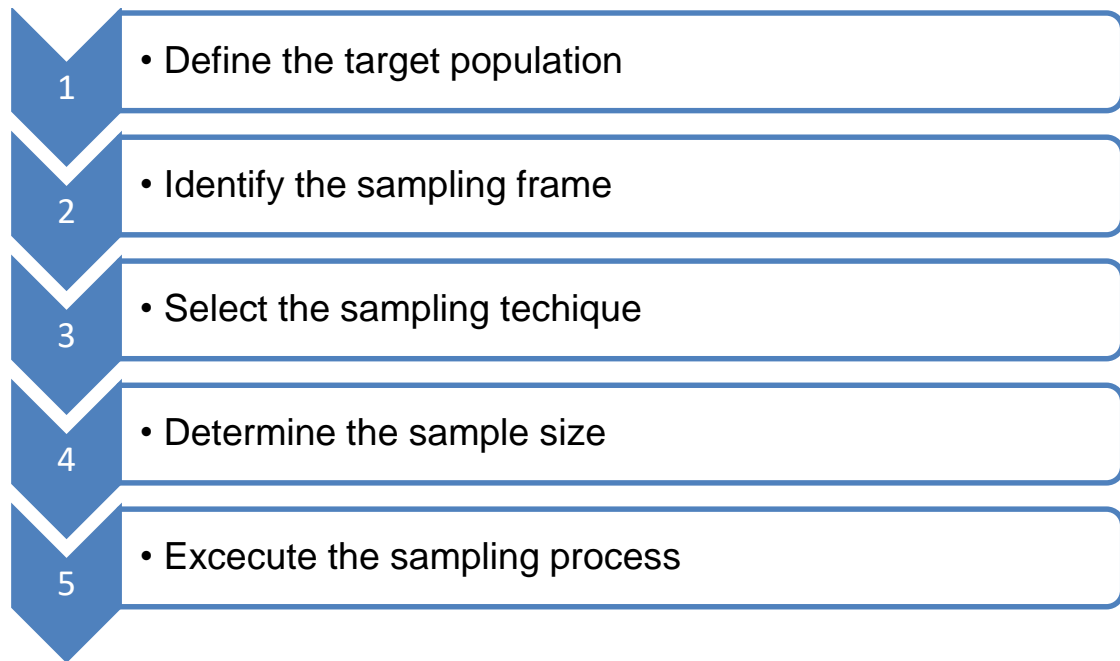


Figure 4-2: Sampling design process

Source: Malhotra (2018:331)

The steps illustrated in Figure 4-2 are discussed in the following sections.

4.3.1 Target population

According to Malhotra (2018:331), the target population refers to a collection of elements or objects that possess the information sought by the researcher. These elements or objects must share common attributes relevant to the specific research. Generation Y is of interest to marketers since Generation Y makes up 35 percent of South African population and although many are unemployed those who successfully finish their studies will have a higher future earning potential as well as a higher social status within their communities (Statistics South Africa, 2018; Van der Merwe et al., 2018; Noble et al., 2009:617). The target population decided on was Generation Y students between the ages 18 and 26 years, registered at a South African HEI during 2017.

4.3.2 Sampling frame

Waarts *et al.* (1997:106) define the sampling frame as a list of elements, which in this study were universities, from which the sample will be drawn. Table 4-1 outlines the South African public HEIs and the number of students enrolled therein during 2018.

Table 4-1: South African higher education institutions

University	City and province	Number of enrolled students
University of South Africa (UNISA)	Pretoria, Gauteng	299 324
North-West University	Main campus in Potchefstroom, North West	63 395
University of Pretoria	Pretoria, Gauteng	53 232
Tshwane University of Technology	Pretoria, Gauteng	58 901
University of Johannesburg	Johannesburg, Gauteng	51 795
University of KwaZulu-Natal	Durban and Pietermaritzburg, KwaZulu Natal	46 472
University of the Free State	Bloemfontein, Free-State	36 296
Cape Peninsula University of Technology	Cape Town, Western Cape	34 455
University of the Witwatersrand	Johannesburg, Gauteng	37 448
University of Stellenbosch	Stellenbosch, Western Cape	30 191
University of Cape Town	Cape Town, Western Cape	29 232
Nelson Mandela Metropolitan University	Port Elizabeth and George, Eastern Cape	27 780
Walter Sisulu University	East London and Mthatha, Eastern Cape	28 581
Durban University of Technology	Durban and Pietermaritzburg, Natal	28 377
University of Limpopo	Turfloop and Pretoria, Gauteng	19 843
Vaal University of Technology	Vanderbijlpark, Gauteng	19 241

University of Zululand	Empangeni, Natal	17 662
University of the Western Cape	Tygerberg, Cape Town, Western Cape	21 796
Central University of Technology	Bloemfontein, Free-State	15 708
University of Fort Hare	Alice and East London, Eastern Cape	13 831

Table 4-1: South African higher education institutions (continued ...)

University	City and province	Number of enrolled students
University of Venda	Thohoyandou, Limpopo	15 237
Mangosuthu University of Technology	Umlazi, Durban, Natal	11 588
Rhodes University	Grahamstown, Western Cape	8 136
Sefako Makgatho Health Sciences University	Pretoria, Gauteng	5 402
University of Mpumalanga	Mbombela, Mpumalanga	1 268
Sol Plaatje University	Kimberley, Northern Cape	703
Total number of enrolled students:		975 894

Source: Anon. (2018i)

The sampling frame comprised the 26 registered South African public HEIs. A non-probability judgment sample of four HEI campuses was selected from the sampling frame, two from a traditional university, one from a university of technology and one from a comprehensive university.

4.3.3 Sample method

The sample method determines how participants are selected from the target population. According to Malhotra (2018:335), the two possible sampling techniques are probability and non-probability sampling. In probability sampling, units are selected by chance and all participants have a known, non-zero, probability of being included while nonprobability sample units are selected by the researcher and, therefore, cannot be said to be a

representation of the entire population with complete certainty (Zikmund & Babin, 2013:322). Non-probability sampling is used because it is faster, less expensive and may yield good estimates of population characteristics (Malhotra, 2018:335).

Convenience sampling is a commonly used non-probability sampling technique and is the least expensive and least time consuming. A convenience sample is a sample of convenient elements that are accessible, easy to measure and cooperative (Malhotra, 2018:337). A non-probability convenience sample of 630 full-time undergraduate Generation Y students between the ages of 18 and 26 was used in this study following a single cross-sectional design, in which information is obtained from the sample only once. Questions regarding demographics, including home language and province of origin were included to ensure a representative sample was taken. Lecturers were contacted on each of the campuses and requested to assist in distributing and collecting the questionnaires. The relevance of the study and the voluntary and anonymous nature of the questionnaire were explained to the students. Subsequently, the questionnaires were distributed and collected after completion.

4.3.4 Sample size

According to Cant *et al.* (2008:136), the sample size is the total number of elements from the target population included in the research. The sample size depends on the variation found within the population as well as the desired reliability and accuracy of the study (Waarts *et al.*, 1997: 107). For this study, 700 questionnaires were distributed to full-time undergraduate Generation Y students between the ages of 18 and 26, split between four university campuses. This was in accordance with previous studies of a similar nature (Bevan-Dye & Ukupojivi, 2016:118; Mofokeng *et al.*, 2015:135; Synodinos *et al.*, 2013:19). The minimum number of respondents required for a covariance-based structural equation model is 200 and reliable observations are more likely when there is a 10:1 ratio of cases to free parameters (Wolf *et al.*, 2013:914). Hair *et al.* (2010:662) propose that when seven or more constructs are used the sample size should be between 300 and 500. A sample size of 700 full-time Generation Y students was deemed satisfactory for this study on the presumption that not all of the replies would be useable. Attempts were made to split the sample between the four selected campuses and obtaining at least 100 responses from each, thereby ensuring that the results were

representative and not skewed in favour of one campus. The number of completed and usable questionnaires returned equated to 630, which yielded a response rate of 90 percent and satisfied the conditions for structural equation modelling.

4.4 MEASURING INSTRUMENT AND DATA COLLECTION METHOD

Empirical research can be divided into quantitative and qualitative research. Qualitative research is primarily used in exploratory research to gain insight into reasons, opinions and motivations in order to gain a better understanding of a problem. Quantitative research, in comparison, is used to quantify a problem by generating data based on defined variables that can be used in statistics (Wyse, 2011). This study used quantitative research to gather empirical data. Quantitative research can use either survey or observation methods to gather data (Malhotra, 2018:167). Using observation to gather data is a systematic process of observing and recording behaviour while the survey method may employ a self-administered questionnaire to collect data from participants (Kent, 2007:182).

A self-administered questionnaire was chosen as the data collection method for this study because of the relative ease of coding, analysis and interpretation of data (Malhotra 2018:167). According to Zikmund (2003:158), a self-administered questionnaire is a survey in which the participant takes responsibility for reading and answering the questions. The questionnaire used in this study made use of fixed alternative questions that required participants to rate their strength of agreement or disagreement on a statement on a six-point Likert type scale. This made the questionnaire simple to administer and the data gathered reliable, since responses are limited to the options given (Malhotra, 2018:167).

After ethical clearance was gained, constructs from various validated scales were harvested and tested in a pilot in which 59 students participated. The results from the pilot study were then used to design a final questionnaire, which was administered after classes or in classes after gaining permission from lecturers at the selected campuses.

4.4.1 Questionnaire design

A questionnaire is a formalised set of questions for obtaining information about the research question from participants (Cant *et al.*, 2008:147). According to Malhotra (2018:293), a questionnaire must translate the required information into a set of questions that participants can and will answer, motivate and encourage the participant to cooperate and complete the interview and minimise response errors.

A researcher must consider relevance and accuracy when developing a questionnaire (Zikmund, 2003:250). Furthermore, a researcher must decide between fixed-alternative questions in which the participants must choose the most relevant option and open-ended questions in which participants must answer in their own words. For this study, a Likert type scale was used to determine the strength of agreement by the participants on certain statements. A Likert type scale was selected because it is easy to construct and administer because participants find it easy to use (Malhotra, 2018:266).

4.4.2 Questionnaire content

The questionnaire was designed to meet the empirical objectives of the study. The questionnaire was divided into three sections. Section A dealt with demographics and ensured that the participants were part of the target population and that the study was suitably representative of the target population. Section B contained questions that measured the actual credit use by the participants and Section C was a six-point Likert type scale used to measure the constructs.

Based on the literature review in Chapters 2 and 3, six constructs were selected and tested to see how they influence credit usage intentions. The scales selected were previously validated and from the following studies:

- Materialism - Richins and Dawson (1992): A consumer values orientation for materialism and its measurement: scale development and validation.
- Status consumption - Eastman and Liu (2012): The impact of generational cohort on status consumption: An exploratory look at generational cohort and demographics on status consumption.

- Social comparison - Norvilitis and Mao (2013): Attitudes towards credit and finances among college students in China and the United States.
- Impulsive buying - Rook and Fisher (1995): Normative influences on impulsive buying behaviour.
- Money as a motivator - Monteiro *et al.* (2015): Attitudes towards money and motivational orientation to work in Brazilian young workers.
- Credit attitude - Xiao *et al.* 1995: College students' attitudes towards credit cards, as well as Lea *et al.* (1995): Psychological factors in consumer debt: Money management, economic socialization, and credit use.
- Credit usage intentions - Fishbein and Ajzen (1975): Belief, attitude, intention, and behaviour: An introduction to theory and research and Ajzen (1991): The theory of planned behaviour. Organizational behaviour and human decision processes.

4.4.3 Questionnaire structure

The questionnaire started with a cover letter explaining the reason for the study and the anonymous and voluntary nature. The questionnaire was then divided into three sections. Section A deals with demographical information and includes screening questions to ensure all participants are part of the target population. Section B was used to gather information on the credit usage of the participants. Section C measured image consciousness, materialism, compulsive spending, status consumption and attitude towards money among the participants to determine how these factors affect their attitude towards credit and credit use intentions. This is done using a six-point Likert type scale ranging from strongly disagree to strongly agree.

Table 4-2 provides a breakdown of the sections that made up the questionnaire.

Table 4-2: Questionnaire design

Item	Construct
A1 – A6	Demographical data
B1 – B7	Actual credit use
C1 – C6	Materialism
C7 – C10	Status consumption
C11 – C14	Money as a motivator
C15 – C22	Impulsive buying
C31 – C37	Credit attitude
C58 – C44	Credit intentions

The following section contains a discussion of the pre-testing and piloting of the questionnaire.

4.4.4 Pre-testing and pilot testing

Before the main study, the questionnaire was pre-tested and a pilot study was done among a sample of the target population that were not included in the main study. A pre-test is done to identify and eliminate any potential problems participants may experience in answering a questionnaire. The content, layout, instructions and questions on the questionnaire are all examined to ensure an accurate response is received. In the debriefing form of the pre-test, participants first complete the questionnaire and then are questioned on their understanding of the questions and to explain their responses (Malhotra, 2018:312). According to Zikmund and Babin (2013:302), the people selected to participate in a pre-test should be similar to the target population to ensure their responses and understanding are similar to how actual participants of the main study will respond to the questionnaire when the actual data-gathering takes place and to test

whether the participants will encounter any difficulties in understanding the questions and whether there are any ambiguous or biased questions. Pre-testing was done among a group of postgraduate marketing students and marketing lecturers and their suggestions were incorporated into the questionnaire in order to get better and more accurate responses.

According to Bradley (2010:211), a pilot test should be done before the real survey to ensure that a questionnaire is working in the way it was intended and that participants understand the questions. This is done to determine if the questions are clear, easy to understand and relevant. The data from the pilot test is assessed for internal-consistency reliability and the convergent and discriminant validity of the items within the constructs. The pilot test was conducted among students similar to those of the target population that did not form part of the main study to avoid the possibility that students may be tested more than once.

4.5 ADMINISTRATION OF THE QUESTIONNAIRE

Data collection involves the actual collection of the required data with a survey questionnaire, which may be done electronically, telephonically, through the mail or through personal interviews (Malhotra, 2018:704). The best method of data collection is determined by the survey method, cost, the quality of the data required, the length of the questionnaire and the time available to complete the questionnaire (McDaniel & Gates, 2010:143). This study used self-administered questionnaires because of the large sample, convenience, time limitations and because it was believed to have the highest potential response rate.

The administration of the questionnaire was completed in 2017 and 630 Generation Y students from the four campuses participated. Lecturers were contacted on each of the campuses and requested to assist in distributing and collecting the questionnaires. The relevance of the study and the voluntary and anonymous nature of the questionnaire were explained to students. Subsequently, the questionnaires were distributed and collected after completion.

4.6 DATA PREPARATION

Malhotra (2018:410) highlights that there are several steps of data preparation, which include editing, coding, capturing and cleaning of the gathered data.

4.6.1 Editing

Editing ensures that answers are complete, accurate and suitable. Any questionnaires that are incomplete, inaccurate or unsuitable can be returned to the participant, completed by the researcher, used as is or discarded (Bradley, 2010:314). During the editing stage, questionnaires were discarded if they were incomplete (that is, more than 10 percent of the scaled-response items were not completed) or did not fall into the target population.

4.6.2 Coding

Coding is the process of converting raw data into symbols and groups (Iacobucci & Churchill, 2010:351). This enables complex meanings to be broken down by assigning a code, usually a number (Bradley, 2010:314). Malhotra (2018:411) adds that when the questionnaire is structured, the answers can be pre-coded because codes are assigned to all possible answers before the fieldwork is done. The questionnaires used in this study were pre-coded with each response having been assigned a specific number. Table 4-3 summarises the coding information.

Table 4-3: Coding information

Type of data	Section	Question number
Demographic	A	Items 1-7
Current credit usage	B	Items 1-8
Attitude	C	Items 1-44

4.6.3 Capturing

Transcribing is the act of reading the coded data into the computer, which was done manually for this study (Malhotra, 2018:416). The data collected in this study was captured with Microsoft Excel and then imported into SPSS and AMOS, Version 25.0 for Windows for analysis.

4.6.4 Data cleaning

Data cleaning checks the consistency of data to find responses that are out of range, logically inconsistent or have extreme values. Missing responses can be substituted with a neutral option or an imputed response, or deleted case-wise or pair-wise (Malhotra 2018:418). In this study, missing values were substituted using the relevant item's mode value.

4.7 STATISTICAL ANALYSIS

The data were captured using Excel and analysed with SPSS and AMOS. The methods used to analyse the data included frequencies, factor analysis, reliability and validity tests, descriptive statistics, correlation testing, structural equation modelling and a two independent samples t-test. These methods are discussed in further detail below.

4.7.1 Frequency analysis

A frequency analysis was done to measure the frequency with which participants selected each option. A frequency distribution shows the number of responses for each value of an item and can be presented as a table, graph or chart for illustration (Malhotra, 2018:439, 705). For Section A and B of the questionnaire, only frequencies were used. These sections describe the demographics of the sample as well as actual credit use. This study used tables as well as bar and pie charts to report on the frequency distributions.

4.7.2 Exploratory factor analysis

In this study, exploratory factor analysis (EFA) was done on the scale-related items in Section C to assess the factorability of the items. Factor analysis is a data reduction statistical method that may be used for exploratory and confirmatory purposes (Pallant, 2016:191). EFA explores the interdependent relationships between items and determines the correlations between variables (Malhotra, 2018:700; 739; Hair *et al.*, 2010:102). Researchers recommend 10 observations per scaled item as larger sample sizes tend to be more reliable. The Kaiser-Meyer-Olkin (KMO) test and Bartlett's test of sphericity were used to measure the sampling adequacy and factorability of the constructs used. A KMO value of 0.60 and higher and a significant Bartlett's test of sphericity value ($p \leq 0.05$) are

an indication of the sampling adequacy and factorability of the data set (Pallant, 2016:192). Given that the study used several scales, albeit from published studies, exploratory factor analysis was conducted in order to check the dimensionality of the factors and to check for any items that cross-loaded across factors.

There are two basic approaches to factor analysis, namely common factor analysis and principal components analysis (Malhotra, 2018:589). Principal components analysis assumes that all communalities are initially 1.0 and the total variance of the items is accounted for by the factors or components, which indicates a no-error variance. This allows the best depiction of the interrelations between sets of variables since the optimal number of factors are extracted (Pallant, 2016:193). To determine the optimal factor solution, several methods are used including setting the number of factors according to the expected number of factors, considering the cumulative percentage of variance by the factors extracted and determining the number of factors by retaining only those with eigenvalues greater than 1.0 (Malhotra, 2018:589). This study used the eigenvalues to determine the number of factors to be extracted. After extraction, factors are rotated either using orthogonal rotation, varimax, quartimax or equamax rotation or with oblique rotation, oblimin and promax rotation. Principle component analysis using promax rotation was used in this study.

Next, factor loadings and communalities are examined. Factor loadings above 0.50 are indicative of both statistical and practical significance. In addition to assessing the factor loadings, it is also important to look at the communalities, which indicate how much variance in each item is explained in the factor solution. If an item has a communality of less than 0.30, it may be unrelated to the other items within that factor (Costelle & Osborne, 2005:4). To retain the highest quality data, items with communalities below 0.30 or factor loadings below 0.50 were deleted. In addition, items that cross-loaded and those that loaded on the wrong factor were deleted (Hair *et al.*, 2010:118).

4.7.3 Descriptive statistics

Descriptive statistics provides a summary of a data set and include measures of central tendency, standard deviation, variability and measures of shape.

Measures of central tendency indicate where the centre of a frequency distribution lies. The three common measures of central tendency include the mode, mean and median. The arithmetic mean or average value, used in this study, is one of the most commonly used measures of central tendency for data collected using an interval or ratio scale. Calculating the mean is done by adding up all the responses and then dividing that figure by the number of responses (Malhotra, 2018:442; Field, 2009:20).

Variability describes how close the distribution of responses is from the middle. This is done with data collected using interval or ratio scales and includes the range, inter-quartile range, variance, standard deviation and coefficient of variation. This study made use of the standard deviation value. While the variance is calculated by subtracting each number from the mean and squaring the result and then calculating the average of the squared differences, the standard deviation is the square root of the variance. The standard deviation is expressed in the same units as the mean, whereas the variance is expressed in squared units (Malhotra, 2018:443; Field, 2009:23).

The shape of any distribution can be described by measures of the skewness and kurtosis. Kurtosis is the peakedness of the distribution, a positive or higher peak indicate a narrower distribution and a negative or low peak indicate a wider distribution. Values greater than +2 are considered peaked or smaller than -2 are considered a low peak (Pallant, 2016:56). Skewness is used to describe the symmetry of the distribution, if the deviation from the mean is larger than +2 or smaller than -2 the distribution is considered unbalanced or skewed (Hair *et al.*, 2010:71).

4.7.4 Collinearity diagnostics

Multi-collinearity occurs when the correlation between constructs, particularly the independent constructs, are excessively high (Pallant, 2016:160). When conducting a multivariate data analysis such as structural equation modelling, high levels of multi-collinearity complicate interpreting the effects of individual independent variables on the dependent variable because of the high correlation between the variables (Hair *et al.*, 2010:2). There are several collinearity diagnostics available on SPSS and this study used the condition index, variance inflation factor (VIF) and tolerance. There is no evidence of multi-collinearity between the independent variables if the last root has a condition index

below 0.30 and none of the constructs has more than one variance proportion greater than 0.50 (Field, 2009:242). Tolerance shows the amount of variance in the independent variable not accounted for by the remaining independent variables. Here, the formula $1 - R^2$ is used. Tolerance levels of 0.10 or less are problematic and an average VIF value of 10 or more are problematic (Orme & Combs-Orme, 2009:27).

4.7.5 Nomological validity

A correlation analysis tests the nomological validity of a model by measuring the strength and direction of the relationship between constructs proposed for inclusion in a measurement model (Hair *et al.*, 2010:710). A Pearson's product-moment correlation coefficient (r) is used to determine the relationship strength between the constructs and (r) values range from -1 to one. Values closer to one indicates a stronger correlation, regular values indicate a positive correlation and a (-) indicates a negative correlation (Malhotra, 2018:513). In order to assume nomological validity, it is necessary that the relationships between the constructs destined for inclusion in a model are statistically significant and in the correct direction, as dictated by the underlying theory (Hair *et al.*, 2010:710).

4.7.6 Structural equation modelling

Structural equation modelling is a confirmatory rather than an exploratory technique that is used to test whether collected data supports a hypothesis or theoretical model. It uses a collection of statistical techniques that allows a theoretical construct, or a set of relationships, between one or more independent variables and one or more dependent variables to be examined. Factors are unobservable or latent, that are represented by multiple items. Structural equation modelling may also be referred to as causal modelling, covariance structure analysis and latent variable analysis (Malhotra, 2018:550). This study tests a structural equation model to determine how materialism, status consumption, social comparison, impulsive buying, money as a motivator and credit attitude influence credit usage intentions using AMOS. The process for structural equation modelling is discussed next:

4.7.6.1 Define individual factors

The hypothesis can only be tested if the model is valid. Therefore, theory developed in earlier studies is used to develop a model that shows how the items are combined to represent factors. This is done through scales used to measure observed items (Malhotra 2018:671). The model used in this study included the following factors; materialism, status consumption, social comparison, impulsive buying, money as a motivator, attitude towards credit and credit usage intentions.

4.7.6.2 Measurement model specification

The theory serves as a foundation for the structural equation model and determines the factors that will be used. Structural equation models are only comprised of two models, namely a measurement model and a structural model. A measurement model shows how the items represent factors and permit the assessment of construct validity and reliability. The degree to which each item is related to its construct is represented by the item's loading and an error term is added since the latent factor does not explain the item perfectly (Malhotra, 2018:671; Lei & Wu, 2007:34). The measurement model is estimated through confirmatory factor analysis, provides an assessment of the overall model fit and indicate the amount of variance explained by the measured items (Babin & Svensson, 2012:325). As the latent construct cannot be observed, one factor loading is fixed – usually at one (Byrne, 2012:307). Standardised factor loadings should fall between zero and one and higher values indicate better-observed items for the latent variable (Lei & Wu, 2007:37). The model must also be examined for any problematic estimates, such as Heywood cases, which are negative error variances. Standardised factor loadings of above 1.0 or below -1.0 may indicate that the measurement model includes sample size errors, model-implied matrices or model specification errors (Kline, 2011:158; Hair *et al.*, 2010:706)

Having a sufficient sample size is important when using structural equation modelling as it influences the stability of the parameter estimates. The sample size required is determined by the model complexity, the estimation method utilised and the distributional characteristics of measured items (Lei & Wu, 2007:34; Kline, 2011:11). Wolf *et al.* (2013:914) propose that the minimum number of participants for a covariance-based

structural equation model is 200 and that reliable observations are more likely when there is a 10:1 ratio of cases to free parameters. When seven or more factors are used, the sample size should be between 300 and 500 according to Hair *et al.* (2010:662). A planned sample size of 700 and actual sample size of 630 full-time Generation Y students were thus satisfactory for this study.

4.7.6.3 Reliability and validity

The consistency of results when a test is repeated is referred to as its reliability. Reliable data are devoid of random error, which comes about due to random differences in study participants or measurement conditions (Malhotra, 2018:275).

The alternative-forms method, the test-retest method and the internal consistency method can be used to assess the reliability of a summated scale. The alternative-forms method gives two different versions of the same test to a participant at different times and the scores are then compared to see if the test is reliable. The test-retest method measures the closeness of agreement between successive tests under similar conditions (Malhotra, 2018:275). In this study, internal-consistency reliability was assessed using Cronbach's alpha (Pallant, 2016:106). Cronbach's alpha values above 0.70 are recommended and values between 0.80 and 0.95 are considered very good (Zikmund & Babin, 2013:364; Field, 2009:675). Cronbach's alpha coefficient values are influenced by the number of items in the scale, artificially increasing/decreasing with an increase/decrease in the number of scale items and therefore the average inter-item correlation values are also reported for scales comprising fewer than 10 items (Pallant, 2016:106). The optimal range of average inter-item correlation values ranges from 0.15 to 0.50 (Clark & Watson, 1995:316). This additional method was used as a test in the pilot study.

The composite reliability (CR) of each factor was also assessed by using the standardised loading and error variance estimates produced in the measurement model in structural equation modelling. The CR average variance extracted (AVE) and the correlation coefficients are computed in order to determine the reliability and convergent and discriminant validity of the latent factors. The CR and AVE values were calculated by the formulae found in Malhotra (2018:675):

$$CR = [(F11+F12+F13+...)^2 / (F11+F12+F13+...)^2 + (err1+err2+err3+...)]$$

$$AVE = [(F11^2+F12^2+F13^2+...) / (F11^2+F12^2+F13^2+...) + (err1+err2+err3+...)]$$

The validity of a measurement instrument determines if the instrument measures that which it was designed to measure and whether the instrument is free of both random and systematic error. Validity may refer to face validity, criterion validity and construct validity (Malhotra, 2018:278). Criterion validity is the extent to which a measure is related to the outcome. Construct validity is the degree to which a test measures what it is designed or aims to be measuring. Face validity, or content validity, refers to the extent to which the measurement instrument covers the topic being researched and is determined through subjective evaluation (Malhotra, 2018:278). In this study, two marketing academics perused the questionnaire to assess its face validity.

Construct validity determines whether the scale measures the relevant construct and not something else (Mouton & Marais, 1990:68). Construct validity occurs if the scale follows the theory and thus relies on an understanding of theoretical foundations underlying the obtained measurement (McDaniel & Gates, 2010:319-320). Convergent, discriminant and nomological validity of the measurement instrument are assessed to establish construct validity. Construct validity is determined by convergent validity, the degree to which two measures that theoretically should be related, are in fact related, discriminant validity, whether measurements that are not supposed to be related are actually unrelated and nomological validity, the degree to which a construct behaves as it should within a system of related constructs (Malhotra, 2018:279; Churchill *et al.*, 2010:416). In this study, Pearson's product-moment correlation was used to test the associations between all of the latent factors, which provided an indication of the nomological validity of the proposed measurement. Convergent and discriminant validity were assessed by considering the standardised factor loadings and average variance extracted (AVE) in the measurement model in structural equation modelling. AVE values of 0.50 and standardised factor loading estimates above the 0.50 level indicate convergent validity. Discriminant validity is in evidence when the squared-root of the AVE values exceeds the correlation coefficients produced in the measurement model (Hair *et al.*, 2010:709).

4.7.6.4 Structural model specifications

A structural model shows the theoretical relationships between constructs, often with multiple dependence relationships. These relationships are drawn with arrows to represent theoretical relationships - dependence relationships with a straight arrow and correlation relationships with curved arrows (Malhotra 2018:668; Lei & Wu, 2007:34). The structural model determines how latent variables directly or indirectly influence the values of other latent variables (Byrne, 2012:14). Structural models consist of exogenous and endogenous variables or constructs. Exogenous constructs are independent constructs that are not influenced or explained by other factors in the model. Endogenous constructs are dependent constructs and are affected by both exogenous and other endogenous constructs (Malhotra, 2018:669). Variables can also act as mediators, which explain how or why an independent variable influences the dependent variable (Gunzler *et al.*, 2013:390). The paths between the latent factors show how constructs influence each other and this path analysis involves simultaneously estimating multiple regression models or equations (Lei & Wu, 2007:34). A path analysis allows complex structures, diagrams or models to be analysed to determine which hypothesised model will best suit or fit the data set (Hox, 1998:329-330). To do this, a comparison is made between the correlation matrix and the regression weights in the model and the goodness-of-fit statistics are calculated. The strength of each individual relationship is analysed using covariance or correlation matrix as input (Malhotra, 2018:664). Pathway analysis has three main requirements. First, all the variables should be measured without error. Secondly, error terms should not be inter-correlated. Thirdly, all causal relationships between the latent factors must be linear and unidirectional (Schreiber *et al.*, 2006:326). If the paths are not significant as envisioned, the paths between the constructs may be changed or re-specified (Khine, 2013:16).

4.7.6.5 Measurement and model fit

Structural equation modelling is not only used to test relationships between dependent and independent variables but is also able to test the model fit (Pallant, 2016:118). This is done using various measures designed to measure fit, which consist of absolute fit, incremental fit and parsimony fit. Absolute fit indicates goodness of fit or badness of fit.

Goodness of fit measures indicates how well the theoretical model fit the sample data. Parsimony of fit is useful in evaluating competing models (Malhotra, 2018:673).

This study utilised the absolute fit indices of the chi-square, standardised root mean residual (SRMR) and root mean square of approximation (RMSEA). Lower values indicate better model fit and values of less than 0.08 are desirable for both SRMR and RMSEA (Malhotra, 2018:673). The incremental fit indices used were the comparative fit index (CFI), incremental fit index (IFI) and Tucker-Lewis index (TLI) indices. Values for CFI, IFI and TLI range between 0 and 1 with values higher than 0.90 indicating a good fit (Malhotra, 2018:673). For comparison, Akaike's information criterion (AIC) and Bozdogan's consistent version of the AIC (CAIC) were used, with smaller AIC and CAIC values suggesting better fit (Byrne, 2012:82).

4.7.7 Two independent samples t-test and Cohen's D

A t-test is a technique used for testing if there is a statistically significant difference between means. The three main types of t-tests are the one sample t-test, two independent-samples t-test and paired sample t-test. The one sample t-test is used to determine if a sample of observations could have been generated by a process with a specific mean. The paired sample or dependent sample t-test, is used to determine whether the mean difference between two sets of observations is zero by measuring each subject twice which results in pairs of observations. The two-independent samples t-test determines possible variations between means that have been sampled from two independent samples (Zikmund & Babin, 2013:390; Pallant, 2016:249). Cohen's D is used to determine if the difference between means is practically significant or not and shows the strength of different effect sizes. Values between 0.20 and 0.50 suggest a small, relatively non-significant effect. Values between 0.50 and 0.80 suggest a medium-sized effect and values above 0.80 are indicative of a large effect with practical significance (Silver *et al.*, 2013:211; Pallant, 2016:219).

This study made use of the two independent-samples t-test and Cohen's D to determine whether gender played any part in determining Generation Y students' attitudes towards credit and/or credit use intentions.

4.8 CONCLUSION

This chapter offered an explanation of the research methodology followed in this study to reach the empirical objectives set in Chapter 1. A descriptive approach, utilising a single cross-sectional design, was selected and frequency analysis, exploratory factor analysis, collinearity diagnostics, descriptive statistical analysis, nomological validity, structural equation modelling, a t-test and Cohen's D statistic were used to analyse the data. The statistical programmes used to analyse the data included SPSS and AMOS.

A convenience sample of Generation Y students was selected from two traditional university campuses, one university of technology campus and one comprehensive university campus. After data collection, 630 useable responses were collected. Chapter 5 reports on the results of the data analysis.

CHAPTER 5

DATA ANALYSIS

5

5.1 INTRODUCTION

In this chapter, the results of the data analysis are discussed, based on the empirical objectives of the study, as set out in Chapter 1 and following the methodology discussed in Chapter 4. The results of the pilot test are summarised in Section 5.2 and the data gathering process in Section 5.3. In Section 5.4, the preliminary data analysis is discussed. A description of the demographics of the sample is provided in Section 5.5 and in Section 5.6, the credit use by the participants is indicated. Section 5.7 contains the results of the exploratory factor analysis. Section 5.8 discusses the descriptive statistics and Section 5.9 reports on the multi-collinearity diagnostics. Section 5.10 shows how nomological validity was established. Section 5.11 lists the various hypotheses that were formulated for the study. Section 5.12 describes the confirmatory factor analysis and path analysis that were used to determine the relationship between materialism, status consumption, money as a motivator, impulsive buying, social comparison, credit attitude and credit intentions. Section 5.13 outlines the results of the two independent samples t-test.

Data were first collected for a pilot test to ensure the reliability of the data gathered.

5.2 PILOT TEST

Prior to the pilot test, constructs were pre-tested by consulting with two marketing academics. Their input together with the existing literature determined the constructs selected for the pilot test. The pilot questionnaire was then constructed using validated scales selected from relevant and related studies. A convenience sample of 59 Generation Y students from a traditional university participated in the pilot study during the latter half of 2016. The participants from the pilot study did not participate in the main study. The relevant constructs from the selected literature, as discussed in Chapter 3,

were tested for internal-consistency reliability. These pilot test results are outlined in Table 5-1.

Table 5-1: Pilot test results

Items	Number of items	Mean	Std. dev.	N	Cronbach's alpha	Average inter-item correlation
Section C						
C1 – C6	6	4.3729	0.93942	59	.633	.229
C7 – C10	4	2.6144	1.30757	59	.821	.534
C11 – C14	4	4.3941	1.26730	59	.814	.508
C15 – C22	8	3.0106	1.19475	59	.840	.395
C23 – C30	8	3.0106	1.09325	59	.802	.332
C31 – C37	7	3.7676	0.97934	59	.726	.284
C38 – C44	7	2.7143	1.13668	59	.821	.402

As shown in Table 5-1, the mean of the constructs pilot ranged from 2.6 to 4.4, with standard deviations (Std. dev) between 0.9 and 1.3. All of the constructs except materialism had Cronbach alpha values above 0.7, indicating good internal-consistency reliability (Pallant, 2016:8). While materialism's Cronbach's alpha was below 0.7 at 0.63, this is still acceptable, according to Malhotra (2018:277). Moreover, all the constructs' average inter-item correlation values were above the recommended value of 0.15 (Clark & Watson, 1995:316). Since all of the constructs used have been validated and proved robust, it was decided to include those scales in the study.

5.3 DATA GATHERING PROCESS

Data were collected using a self-administered questionnaire. The administration of the questionnaire was completed during 2017. For the study, 630 Generation Y students from four university campuses participated. No distinction was made between undergraduate and postgraduate students but questionnaires were rejected when the participants were younger than 18 or older than 26. Attempts were made to ensure that a sufficient sample was gathered to be representative of the chosen HEIs' student populations. The

questionnaire was either administered to students on their way from or in class, with permission of the lecturer. Every attempt was made to disturb teaching as little as possible. A copy of the questionnaire is attached as Annexure A. Participation was completely voluntary and participants remained anonymous.

5.4 PRELIMINARY DATA ANALYSIS

The preliminary data analysis consisted of coding, data cleaning and tabulation.

5.4.1 Coding

The questionnaire contained three sections named A, B and C. Section A contained six questions to determine the demographic makeup of the sample. Section B contained seven questions to determine the participants' actual credit use. Section C contained 44 questions from six different constructs of materialism, status consumption, money as a motivator, impulsive buying, social comparison, attitude to credit and credit intentions. The questionnaire did not include any reversed items.

Table 5-2 shows the sections, the item codes and the assigned values.

Table 5-2: Coding information

Question	Code	Type	Value assigned to response
Section A		Demographical data	
Question 1	A1	Name of HEI	Traditional University 1 Traditional University 2 University of Technology Comprehensive University
Question 2	A2	Age	(1) <18, (2) 18, (3) 19, (4) 20, (5) 21, (6) 22, (7) 23, (8) 24, (9) 25, (10) 26
Question 3	A3	Gender	(1) Male (2) Female
Question 4	A4	Academic year	(1) First year (2) Second year (3) Third year

-
- (4) Fourth year
 - (5) Postgraduate
-

Table 5-2: Coding information (continued ...)

Question	Code	Type	Value assigned to response
Section A		Demographical data	
Question 5	A5	Home province	<ul style="list-style-type: none"> (1) Gauteng (2) Eastern Cape (3) Limpopo (4) KwaZulu-Natal (5) Mpumalanga (6) Western Cape (7) Northern Cape (8) North West (9) Free-State (10) International student
Question 6	A6	Home language	<ul style="list-style-type: none"> (1) Xitsonga (2) Sesotho (3) siSwati (4) Sesotho sa Leboa (5) TshiVenda (6) Setswana (7) isiNdebele (8) English (9) Afrikaans (10) isiZulu (11) isiXhosa (12) Other

Table 5-2: Coding information (continued ...)

Question	Code	Type	Value assigned to response
Section B		Actual credit use	
Question 8	B1	Types of credit used	(1) I do not use any credit (2) NSFAS (3) Personal loan (4) Micro loan (5) Student loan (6) Loan from family or friends (7) Store card/account (8) Credit card (9) Cell phone contract (10)Other
Question 9	B2	Main source of income	(1) Bursary (2) Loan (3) Work (part-time/fulltime) (4) Parents, family, friends or partner
Question 10	B3	Recent credit purchases	(1) Electronics such as PC, TV or laptop (2) Furniture (3) Cell phone contract (4) Travel or Fuel (5) Medical expenses (6) Textbooks (7) Health and Beauty (8) Entertainment (9) Groceries (10) Clothes (11) Jewellery (12) Other
Question 11	B4	Debt management	(1) I am behind (2) I am struggling (3) I keep up but struggle from time to time (4) I easily keep up (5) I do not pay my own accounts

Table 5-2: Coding information (continued ...)

Question	Code	Type	Value assigned to response
Section B		Actual credit use	
Question 12	B5	Influences on credit	(1) Interest free accounts (2) Discounts and promotions (3) Prestige (4) Loyalty points (5) Safer than cash (6) Availability of emergency funds (7) It is more convenient (8) Ability to pay later
Question 13	B6	Funding applied for	(1) NSFAS (2) Government bursaries (3) Private sector bursaries (4) Eduloan (5) Student loan from bank (6) University bursary
Question 14	B7	Biggest financial concern	(1) Class fees (2) Loans (3) Textbooks (4) Food (5) Travel (6) Residence fees/rent (7) Other

Table 5-2: Coding information (continued ...)

Section C		Constructs	Value assigned to responses
Question 14-19	C1M-C6M	Materialism	(1) Strongly disagree
Question 20-23	C7S-C10S	Status consumption	(2) Disagree
Question 24–27	C11AM-C14AM	Money as a motivator	(3) Slightly disagree
Question 28-35	C15IB-C22IB	Impulsive buying	(4) Slightly agree
Question 35-42	C23SOC-C30SOC	Social comparison	(5) Agree
Question 43-49	C31CA-C37CA	Attitude towards credit	(6) Strongly agree
Question 50-56	C38CI-C44CI	Credit intention	

5.4.2 Data cleaning

Data cleaning was done to screen the completed questionnaires received from participants. For the study, 700 questionnaires were distributed and participants falling outside of the defined target population were discarded. This resulted in 630 useable questionnaires; that is, a response rate of 90 percent. Given that there were 44 scaled items in the questionnaire, 630 participants satisfy the factor/principle component analysis requirement of having between five and ten cases per item (Pallant, 2016:195). The number of participants was also similar to similar studies and, therefore, deemed sufficient (Bevan-Dye & Ukupojivi, 2016:118; Mofokeng *et al.*, 2015:135; Synodinos *et al.*, 2013:19). Moreover, the number of participants satisfies the requirements for structural equation modelling (Wolf *et al.*, 2013:914)

5.4.3 Tabulation

After all the scaled data in Section C had been coded and cleaned by substituting the missing values it was tabulated, as illustrated in Table 5-3.

Table 5-3: Frequency table of responses

Item	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
C1	57	61	47	142	173	150
C2	77	89	67	93	154	150
C3	42	58	77	144	175	134
C4	40	78	86	178	121	127
C5	35	60	41	124	165	205
C6	19	40	37	109	168	257
C7	172	163	111	94	55	35
C8	150	154	117	107	65	37
C9	174	146	110	108	61	31
C10	155	159	100	116	66	34
C11	81	81	76	150	137	105
C12	58	78	103	164	137	90
C13	45	52	75	149	160	149
C14	19	29	46	113	175	248
C15	74	109	96	173	119	59
C16	151	165	108	112	54	40
C17	200	134	85	113	63	35
C18	227	147	84	75	57	40
C19	121	117	100	128	93	71
C20	110	107	84	133	113	83
C21	145	135	88	88	100	74
C22	104	106	79	155	101	85
C23	60	76	76	137	142	139
C24	172	184	88	100	53	33

Table 5-3: Frequency table of responses (continued ...)

Item	Strongly disagree	Disagree	Slightly disagree	Slightly agree	Agree	Strongly agree
C25	134	159	114	91	69	63
C26	165	179	96	105	53	32
C27	221	167	79	92	37	34
C28	134	146	88	132	89	41
C29	230	135	92	78	51	44
C30	324	133	64	49	35	25
C31	245	115	73	81	61	55
C32	99	74	60	131	154	112
C33	70	65	89	159	161	86
C34	151	134	130	109	69	37
C35	100	75	87	135	150	83
C36	145	127	111	140	68	39
C37	88	63	90	138	163	88
C38	191	107	79	104	97	52
C39	163	95	82	116	112	62
C40	284	132	77	63	39	35
C41	118	58	80	151	138	85
C42	207	131	86	109	65	32
C43	164	106	85	142	90	43
C44	173	98	94	121	95	49

In the following section, a description of the sample is provided.

5.5 DEMOGRAPHICS

Section A contained questions aimed at determining the demographic makeup of the participants. This was done to compensate for the use of convenience sampling by providing some measure of the representativeness of the sample.

Figure 5-1 depicts the type of HEI campus that the sample participants were registered at when the study took place.

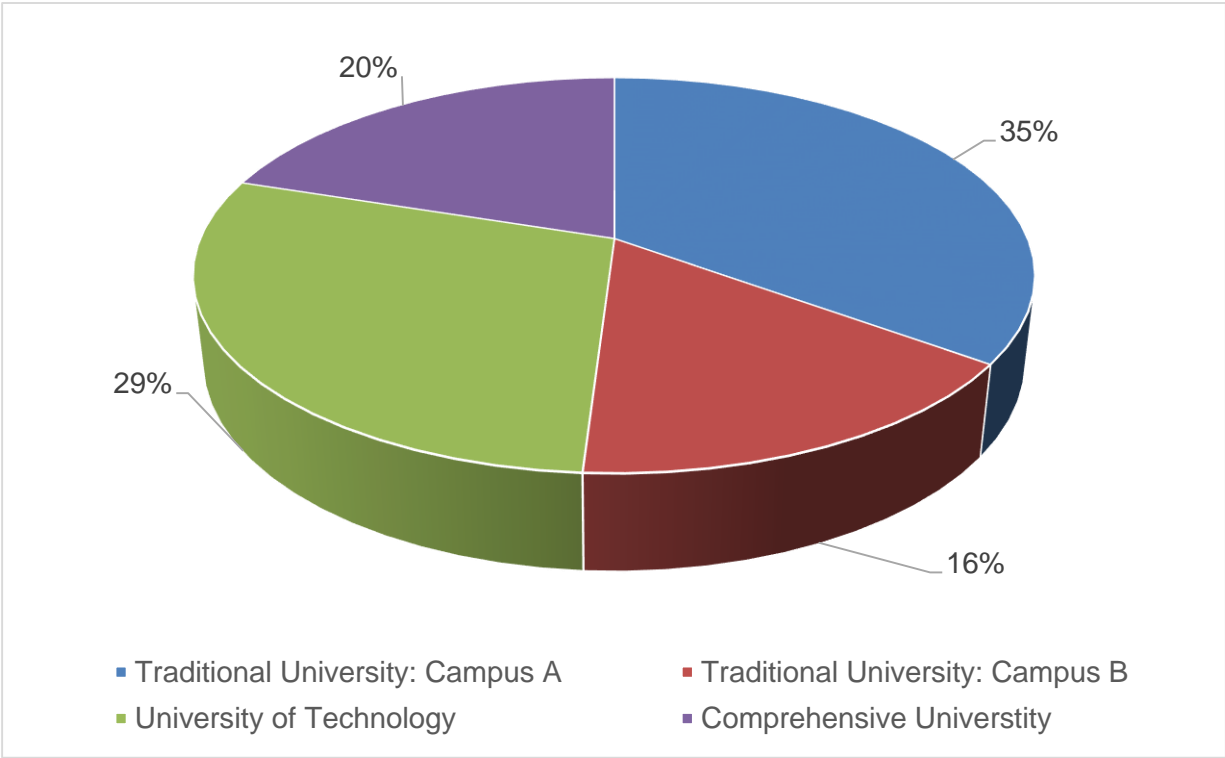


Figure 5-1: Type of higher education institution

As shown in Figure 5-1, the majority of participants were registered at Campus A of the traditional university (35%), followed by 29 percent from the university of technology campus, 20 percent from the comprehensive university campus and 16 percent from Campus B of the traditional university.

Figure 5-2 represents the participants' age categories.

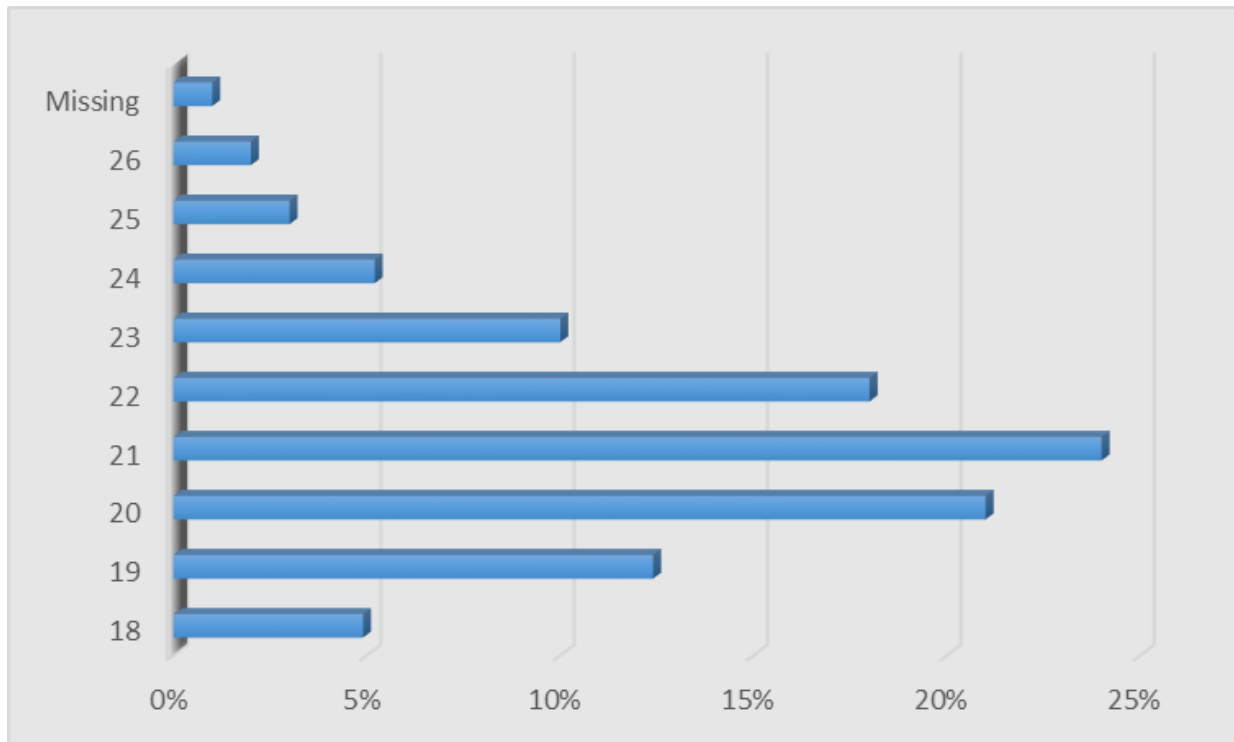


Figure 5-2: Participants' age categories

Students from ages 18 to 26 were selected for the study. Any participants who were either younger than 18 or older than 26 were removed, leaving a sample size of 630 participants. The majority of the participants were between 20 and 22 (75%).

Figure 5-3 depicts the gender distribution in the sample.

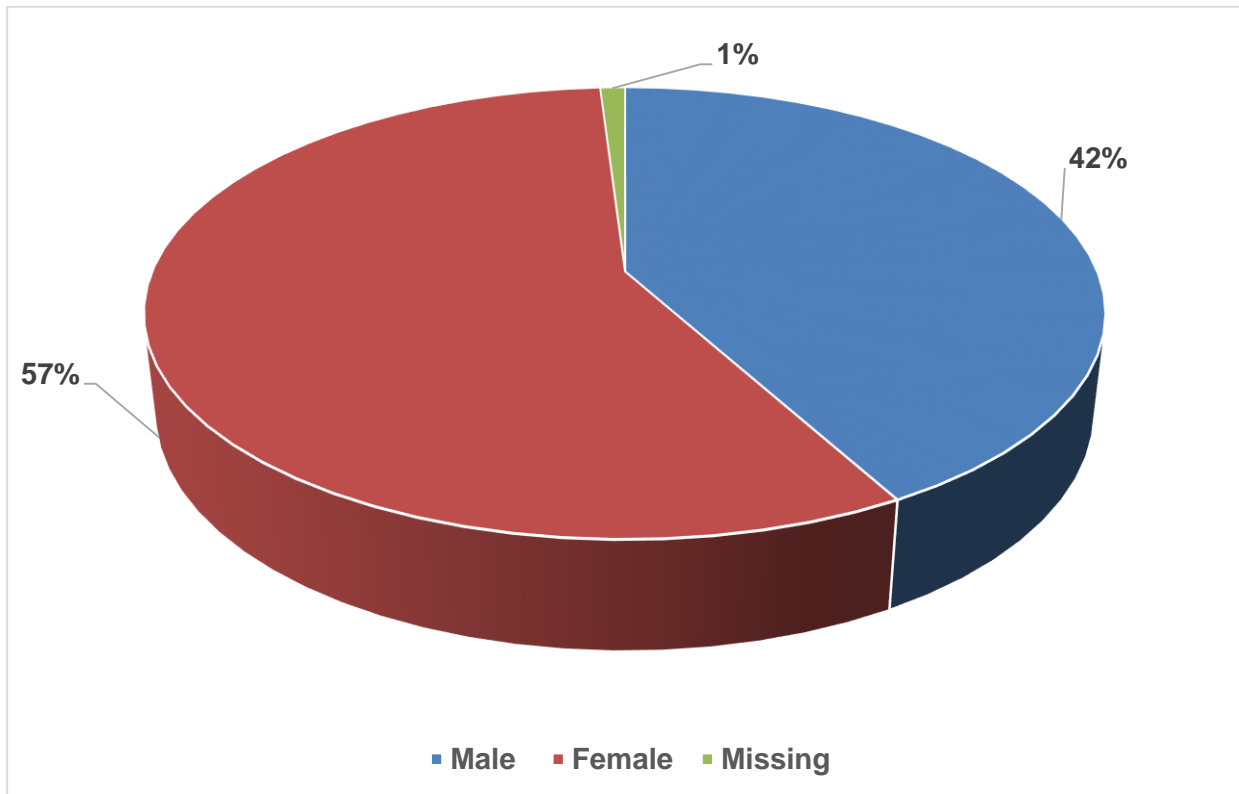


Figure 5-3: Gender

Approximately 60 percent of registered tertiary students in South Africa are female and 40 percent are male (Council on Higher Education, 2016). The participants in the sample closely reflected this trend, with 42 percent of the participants indicating they are male and 57 percent female.

Figure 5-4 illustrates the participants' year of study.

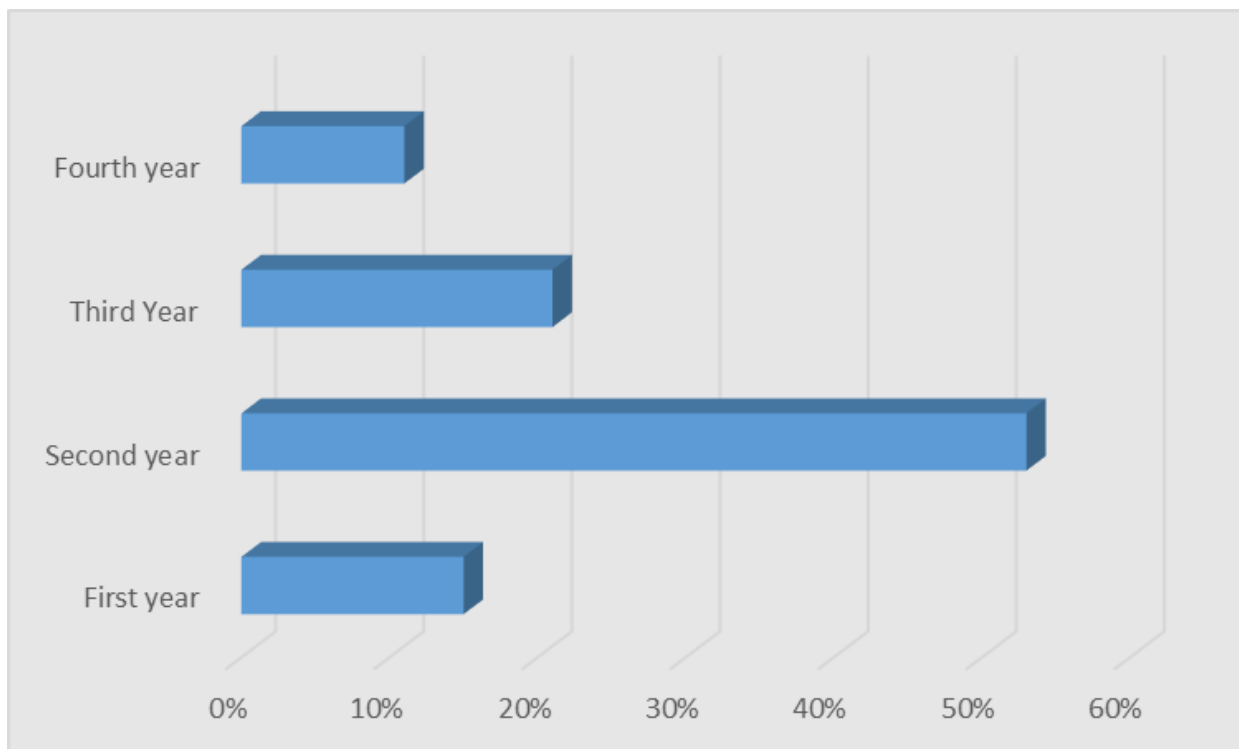


Figure 5-4: Year of study

The majority of participants, 53 percent, indicated that they were in their second academic year of study, followed by 15 percent in their first year, 21 percent in their third year and 11 percent in their fourth year.

Figure 5-5 illustrates the sample participants' province of origin.

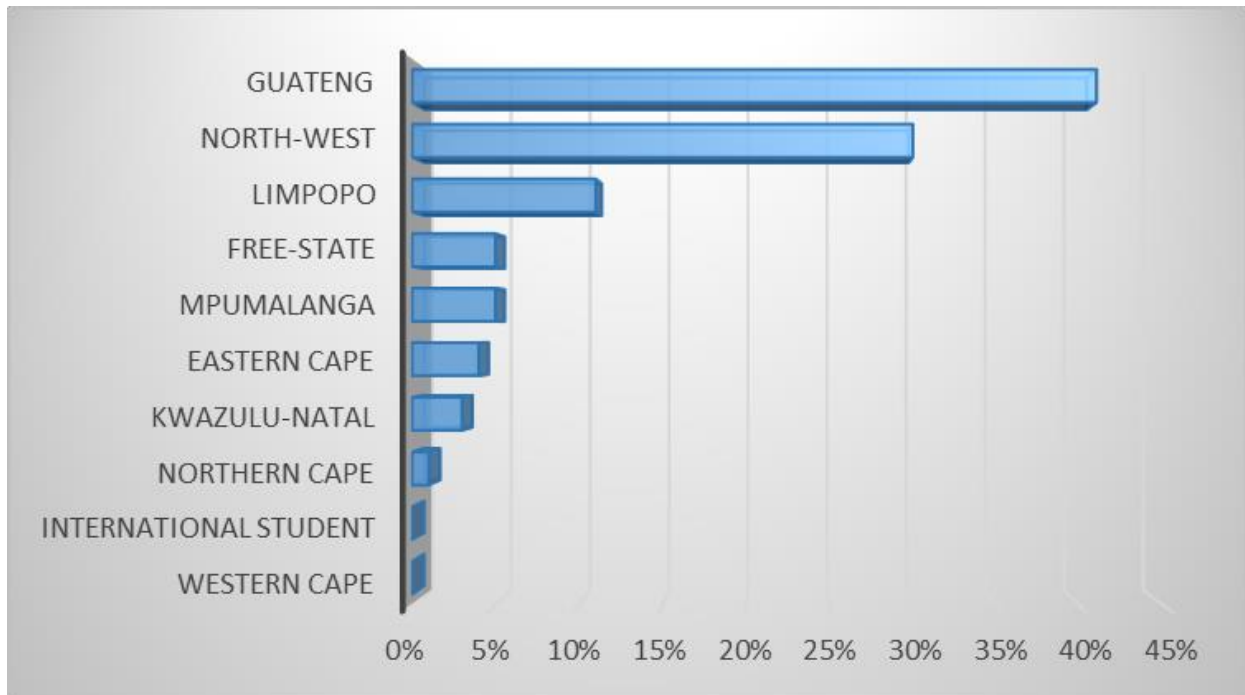


Figure 5-5: Province of origin

Of the participants, 41 percent indicated their province of origin as being the Gauteng province. Given that three of the four university campuses are situated in Gauteng, this was to be expected. This was followed by 30 percent of participants who indicated that they were from the North-West province. Of the participants, three participants did not complete the question. Most importantly, each of South Africa’s nine provinces was represented in the sample.

Figure 5-6 depicts the sample participants’ home language.

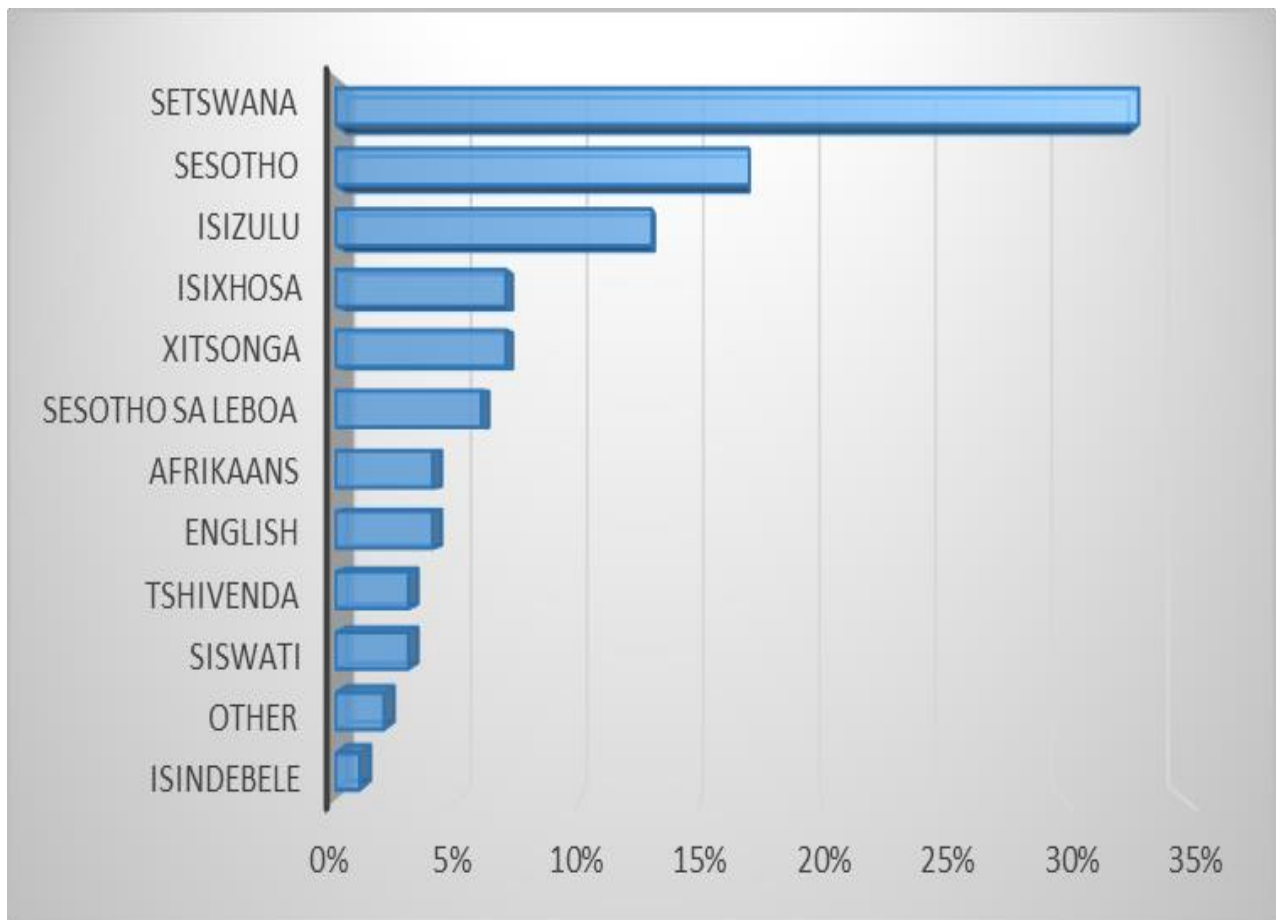


Figure 5-6: Home language

Most of the participants indicated their home language as Setswana (33%), followed by Sesotho (17%) and isiZulu (13%). All of South Africa’s 11 official languages were represented in the sample.

In the following section, Generation Y students’ credit use is reported.

5.6 CREDIT USE

In terms of the first empirical objective set in Chapter 1, Section B focused on determining the participants’ actual credit use. This included participants’ sources of income and credit types, their credit purchases, debt management, and reasons for credit use, credit applications and financial concerns.

Figure 5-7 depicts the types of credit the sample participants reported using.

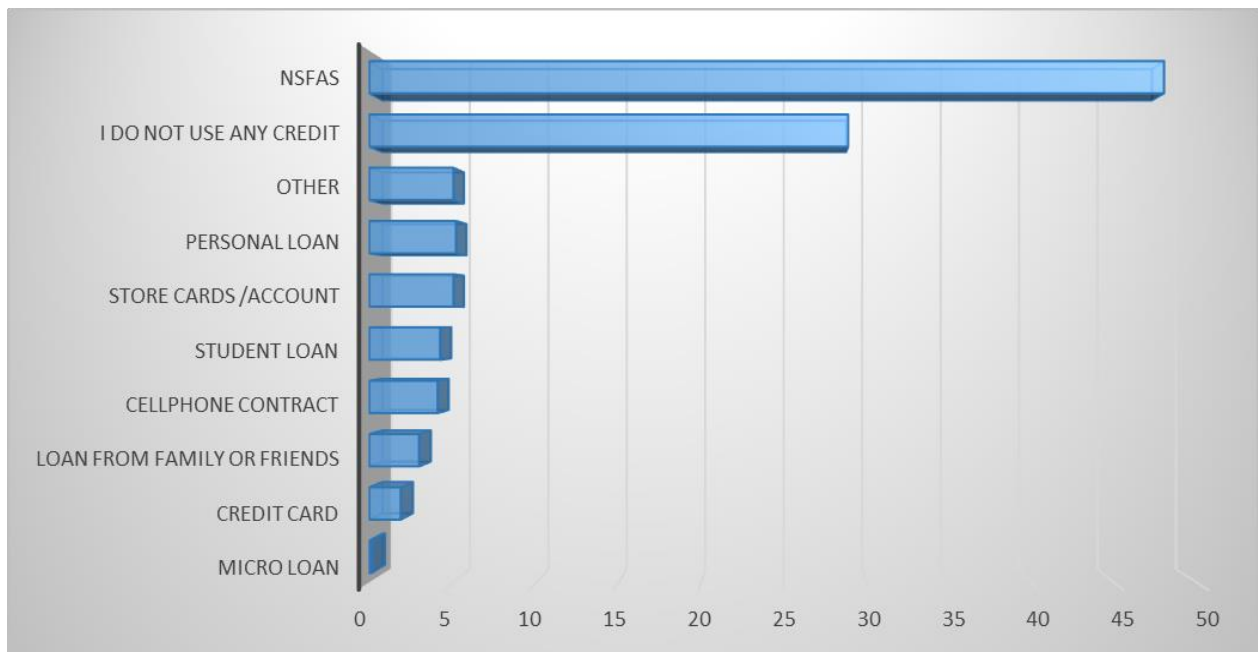


Figure 5-7: Types of credit used

Of the participants, only 29 percent did not use some form of credit. There was 48 percent who indicated that they had NSFAS loans. There are currently approximately 1 000 000 students enrolled at the 26 different universities (Anon., 2018i). NSFAS funds 450 000 students (Gumede, 2016) and 160 000 new students applied for and received loans in 2017 (Shezi, 2017). This means that 45 percent of South Africa's students receive NSFAS funding, which corresponds with the participants' 48 percent NSFAS use. Only 4 percent had traditional student loans and another 4 percent had loans from family and friends, which may be due to the higher popularity of NSFAS. In addition, 5 percent of participants had personal loans, 5 percent had store cards and 4 percent had cell phone contracts. Only 2 percent of participants had credit cards, which is much lower than some previous studies reported (Goko, 2013).

Figure 5-8 reports of the participants' sources of income.

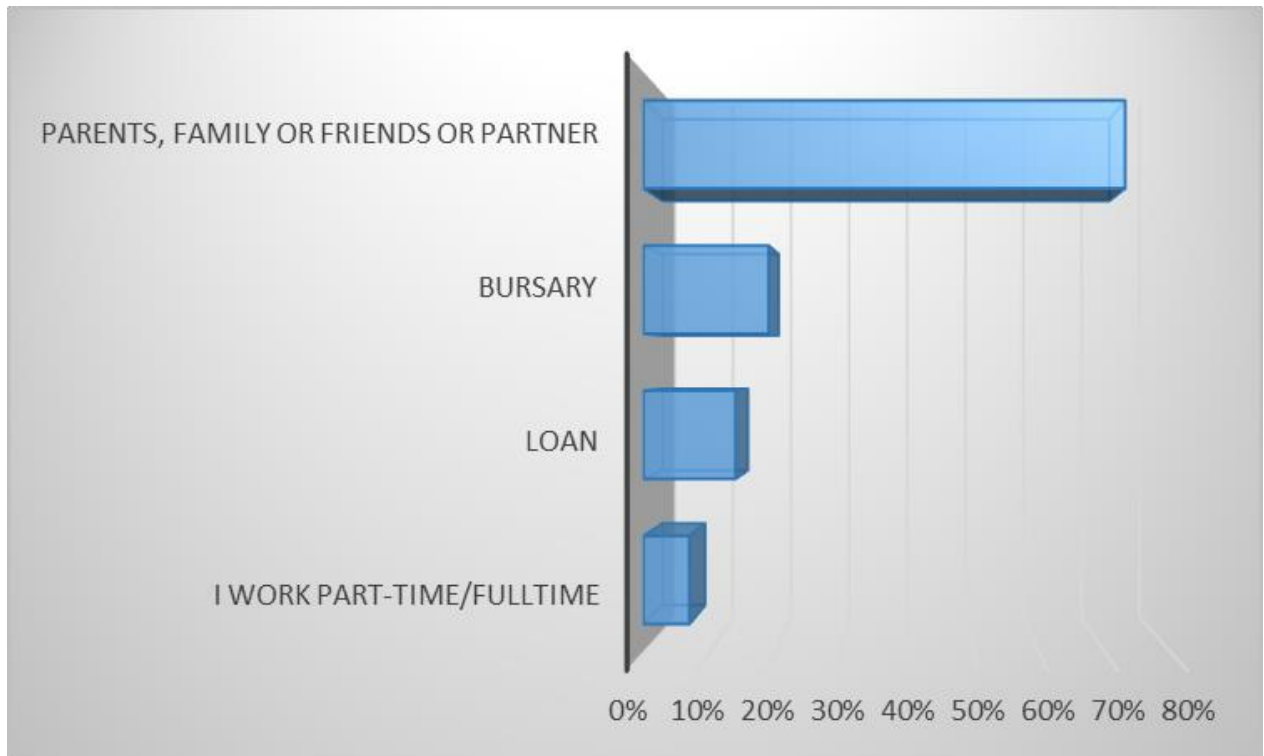


Figure 5-8: Sources of income.

The majority of participants, 73 percent, indicated that they were dependent on parents, friends and family as their primary source of income. External sources of income such as bursaries and loans made up 19 percent and 14 percent, respectively. Only 7 percent of participants were employed and contributed financially to their own education.

Figure 5-9 reports on the type of credit purchases participants indicated making.

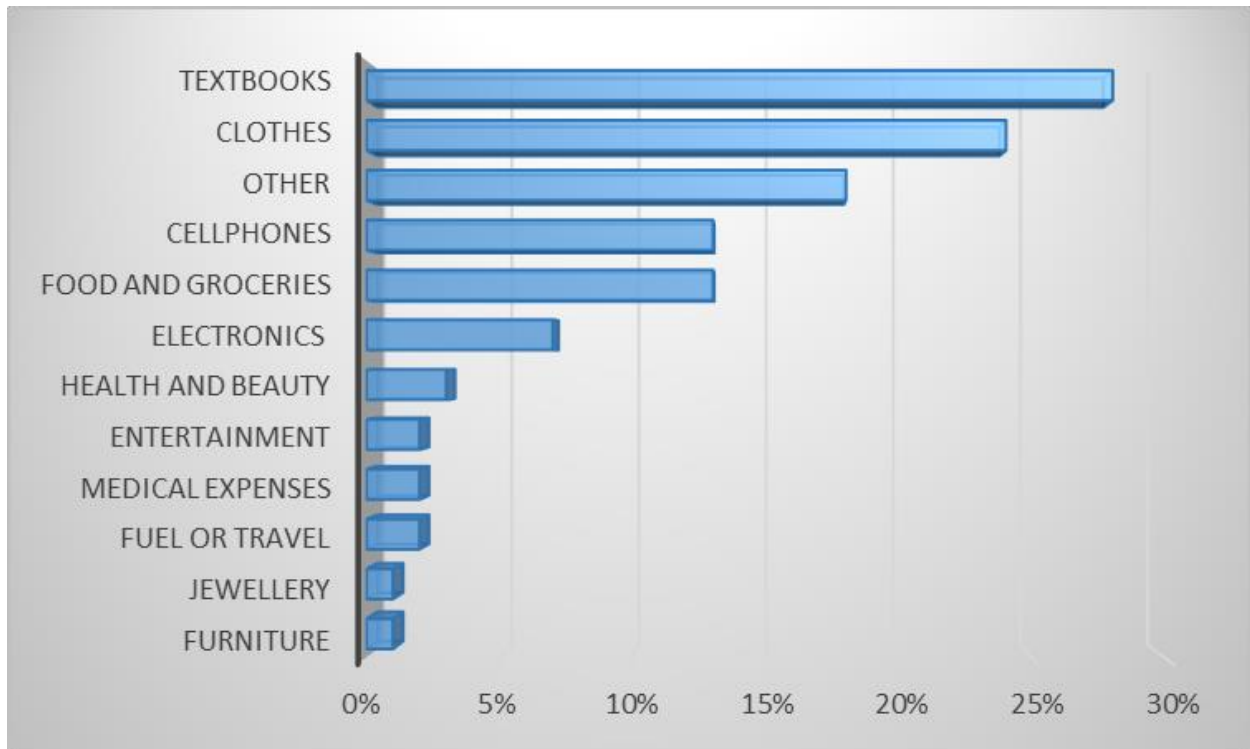


Figure 5-9: Credit purchases

Textbooks, clothes, cell phones and groceries made up the majority of credit purchases. Many of these purchases are not luxuries but necessities and this may be an indication that some participants are purchasing on credit because they have no other option.

Figure 5-10 illustrates the participants' debt management.

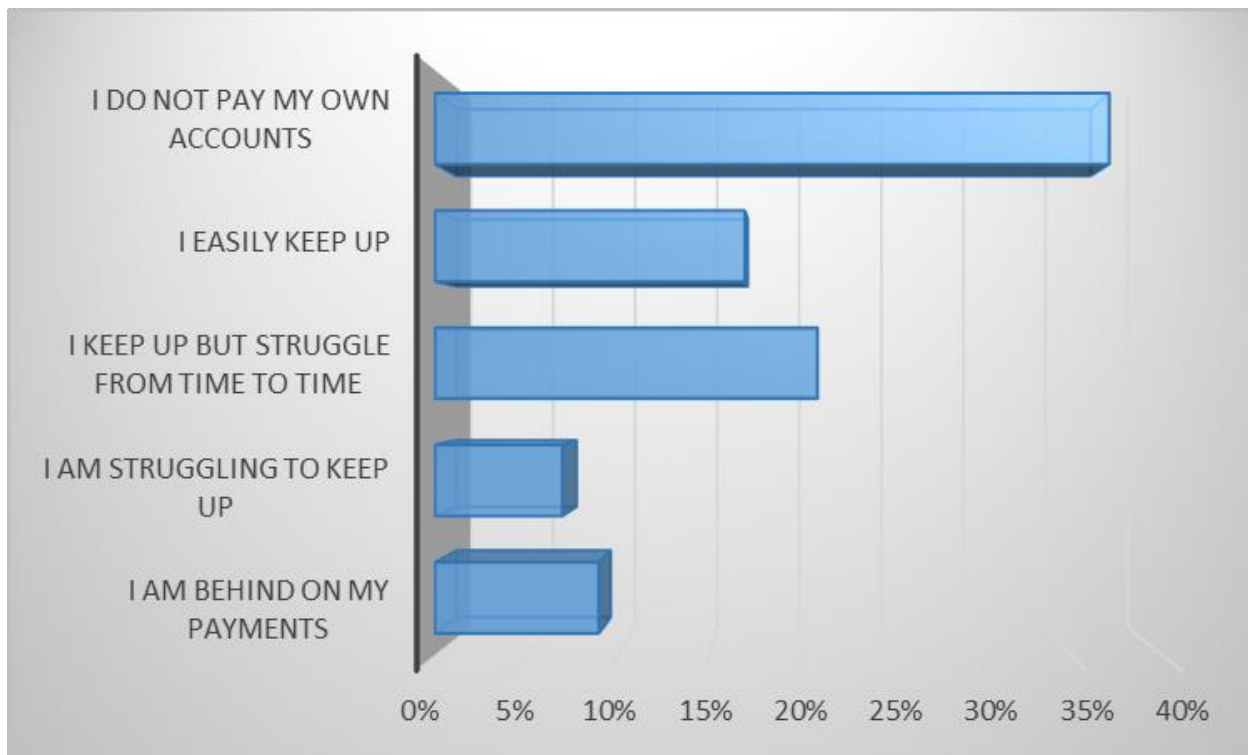


Figure 5-10: Debt management

Of the participants, 9 percent did not answer the question, presumably because they do not have any accounts. Of those that indicated having accounts to pay, 37 percent of the participants did not pay their own credit accounts, 17 percent easily keep up with payments and 21 percent keep up but struggle at times. Only 7 percent were struggling and 9 percent were behind on payments.

Figure 5-11 reports on the participants' reasons for credit use.



Figure 5-11: Reasons for credit use

As can be seen from Figure 5-11, access to future earning was the biggest motivational factor for participants' use of credit. This can be seen from the 41 percent of participants claiming that the ability to buy now and pay later was the biggest motivator for using credit. Safety was also a major concern, with 23 percent of participants claiming that using credit was safer than carrying cash, while the availability of emergency funds motivated 13 percent of participants. Discounts and promotions were important to 17 percent of participants. Convenience (11%), loyalty points (8%) and interest free accounts (7%) each played a small role. Prestige was not an important consideration, with only 1 percent of participants indicating it played a part in their credit use decisions.

Figure 5-12 reports the type of credit applications the sample participants indicated they had made.

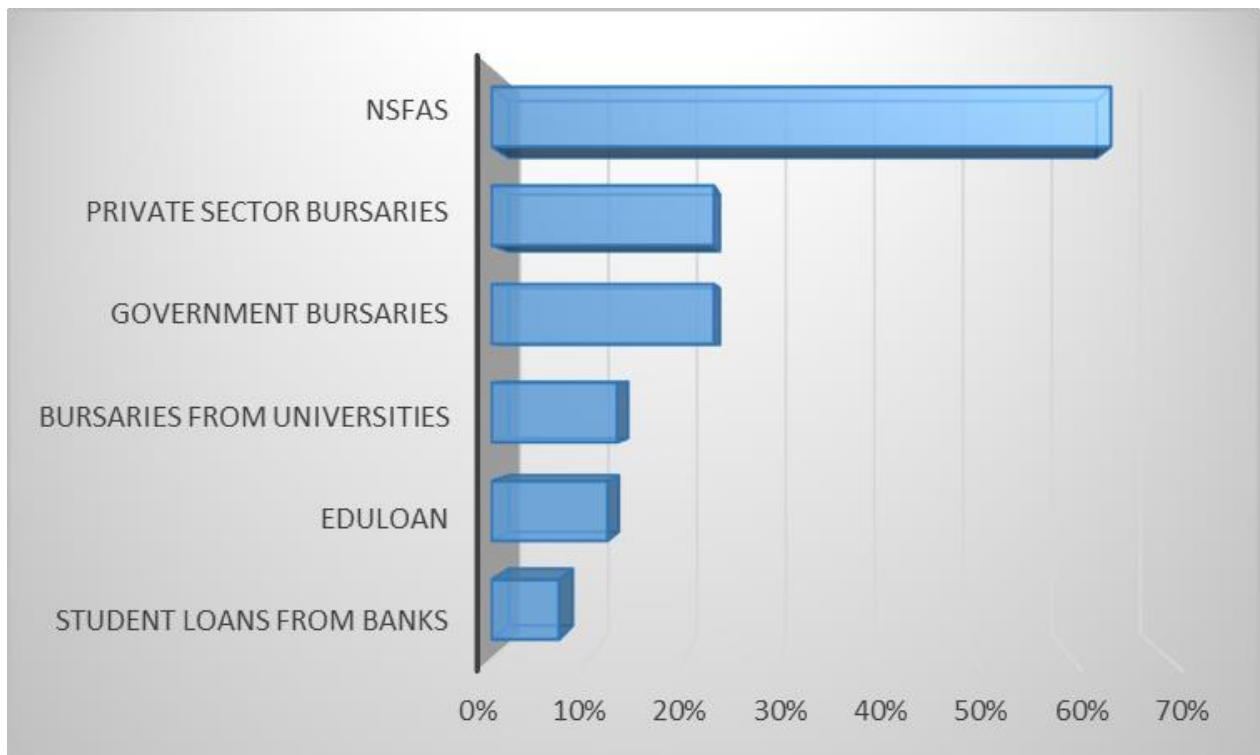


Figure 5-12: Credit applications

Most participants applied for some form of finance. NSFAS was the most popular and 64 percent of participants applied for NSFAS funding although, as shown in Figure 5-7, only 48 percent received NSFAS loans. The challenges faced by the NSFAS programme were discussed in Chapter 2. Bursaries from the government, private industry and universities themselves were not as popular among the participants, given that 23 percent applied for private industry bursaries, 23 percent for government bursaries and 13 for university bursaries. Loans were the least popular way of studying, with only 7 percent of participants applying for student loans from banks and 12 percent for Eduloan assistance. Seen in the light of the shortage of funding, it is concerning that so few participants bothered to apply for bursaries and this may warrant future research.

Figure 5-13 depicts the participants' financial concerns.

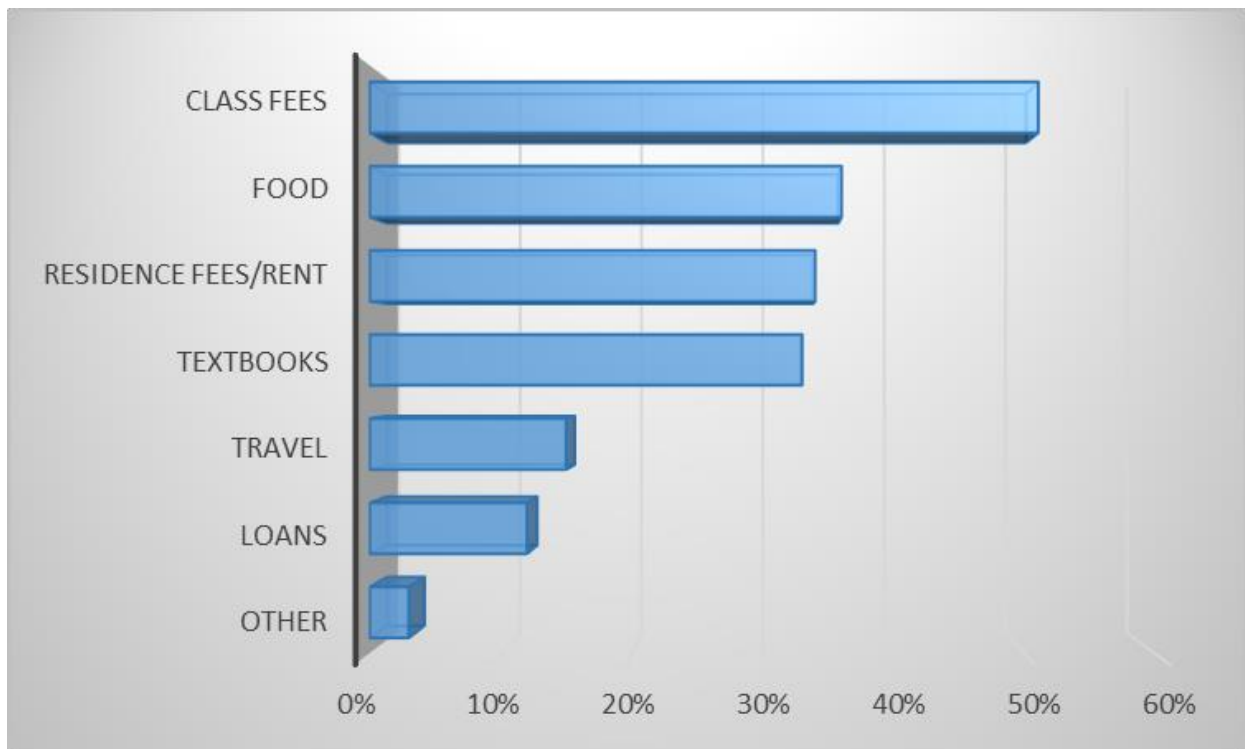


Figure 5-13: Financial concerns

This question dealt with participants' financial concerns. Tuition was a major concern for participants, with 51 percent of participants indicating being concerned about class fees and 33 percent about textbooks. Aside from study-related concerns, 36 percent indicated accommodation as a concern, 36 percent of participants indicated that food was a concern and 15 percent that travel was a concern. Repaying loans was only of concern to 12 percent of participants, which corresponds to the responses depicted in Figure 5-10 that indicated that most participants are either keeping up with payments or are not repaying their loans themselves.

In the following section, the exploratory factor analysis undertaken on the scaled-response questions is discussed.

5.7 EXPLORATORY FACTOR ANALYSIS

Exploratory factor analysis (EFA) was conducted on the scale-related items in Section C to assess the factorability of the items. Given that the study used several scales, albeit from published studies, exploratory factor analysis was conducted in order to ensure that no items cross-loaded and that all items loaded onto the correct factor and that no items

had communalities below 0.30 (Costelle & Osborne, 2005:4). Principle component analysis using the Promax rotation was used. The first EFA had a KMO value of 0.905 and a significant Bartlett's test of sphericity (12058.682; df=946; p=0.000 < 0.05).

The EFA resulted in nine rather than the expected seven factors and these nine factors explained 49.97 percent of the variance. However, an inspection of the communalities and pattern matrix revealed that four items had communality values below 0.3, one item cross-loaded and four items loaded on the incorrect factor. These items included two items from the materialism scale (C1M & C2M), one item from the money as a motivator scale (C14AM), three items from the social comparison scale (C23SOC, C29SOC & C30SOC) and three items from the credit attitude scale (C31CA, C32CA & C33CA). These items were deleted once they had been examined to ensure that their elimination would not alter the original construct's conceptualisation in any way.

The EFA was then rerun without these items, which resulted in a KMO of 0.902 and a Bartlett's test score of 10000.276 (df=595; p=0.000 < 0.05), which explained 52 percent of the variance. The rotated factors from the pattern matrix, together with the eigenvalues and percentage variance extracted are presented in Table 5-4.

Table 5-4: Pattern matrix

	Factors							Communalities
	1	2	3	4	5	6	7	
C3M							.412	.326
C4M							.433	.314
C5M							.731	.510
C6M							.766	.502
C7S			.796					.644
C8S			.856					.716
C9S			.885					.693
C10S			.782					.600
C11AM						.722		.563
C12AM						.920		.800
C13AM						.582		.388

Table 5-4: Pattern matrix (continued ...)

	Factors							Communalities
	1	2	3	4	5	6	7	
C15IB	.477							.386
C16IB	.654							.551
C17IB	.820							.647
C18IB	.722							.494
C19IB	.668							.428
C20IB	.592							.423
C21IB	.678							.436
C22IB	.654							.361
C24SOC				.855				.633
C25SOC				.655				.567
C26SOC				.930				.763
C27SOC				.551				.489
C28SOC				.517				.361
C34CA					.673			.502
C35CA					.701			.470
C36CA					.732			.566
C37CA					.681			.496
C38CI		.643						.523
C39CI		.690						.530
C40CI		.532						.443
C41CI		.583						.332
C42CI		.807						.616
C43CI		.807						.554
C44CI		.758						.590
Eigenvalues	9.18	3.53	2.30	1.90	1.62	1.51	1.32	
Percentage variance	24.92	8.77	5.21	4.20	3.56	2.97	2.43	

As is evident from Table 5-4, the second EFA resulted in the extraction of seven factors with eigenvalues greater than 1.0. These factors are in accordance with the literature and explained 52 percent of the total variance.

Following this EFA, the descriptive statistics for the extracted factors were calculated, as discussed in Section 4.7.

5.8 DESCRIPTIVE STATISTICS

In order to address the second empirical objective in Chapter 1, descriptive statistics were computed. The data in this study were collected using a six-point Likert type scale and the location, variability and shape of the data collected were measured. No reversed items were included in the scale and higher means indicate a greater agreement on the items from each scale. The descriptive statistics computed are outlined in Table 5-5.

Table 5-5: Descriptive statistics

Items	Mean n=630	Standard deviation	Skewness	Kurtosis
Materialism	4.38	1.07	-.567	-.207
Status consumption	2.76	1.30	.397	-.650
Money as a motivator	3.94	1.29	-.396	-.486
Impulsive buying	3.12	1.14	.290	-.551
Social comparison	2.76	1.20	.464	-.449
Credit attitude	3.32	1.24	-.091	-.708
Credit intentions	2.96	1.23	.241	-.634

As shown in Table 5-5, means above 3.5 on the six-point Likert type scale were recorded on only two constructs, namely materialism (mean=4.38) and money as a motivator (mean=3.94). This suggests that Generation Y students have materialistic tendencies and are motivated by money. This is supported by previous research that found that people from developing countries and disadvantaged backgrounds tend to be more materialistic (Duh, 2016:138; Postel, 2008). The mean for credit attitude was marginally below the 3.5 mark (mean=3.32), which infers that Generation Y students have only a moderately

positive attitude towards credit. Means below 3.5 were computed on the remaining constructs, which infers that Generation Y students do not have social comparison, status consumption or impulse buying tendencies. According to the self-reporting measuring instrument used in the study, they also do not appear to have strong credit usage intentions.

The standard deviations were between 1.07 and 1.30. Skewness describes the symmetry of distribution and all of the constructs fell within a -2 and +2 indicating a normal distribution. Kurtosis is the peakedness of the distribution, a positive or higher peak indicating a narrower distribution and a negative or low peak a wider distribution (Pallant, 2016:60). All of the constructs had a negative peak indicating a wider dispersion.

5.9 COLLINEARITY DIAGNOSTICS

It is necessary to check for multi-collinearity between the independent factors when employing multivariate statistical analysis techniques. An evaluation of multi-collinearity between the independent factors was conducted using the SPSS Statistics Collin instruction, with the case number as the dummy dependent variable. The collinearity diagnostics output is reported on in Table 5-6.

Table 5-6: Collinearity diagnostics

Factors	Condition index	Constant	M	SC	MM	IB	SOC
1	1.000	.00	.00	.00	.00	.00	.00
2	6.87	.07	.03	.48	.07	.00	.12
3	8.07	.00	.00	.44	.04	.00	.77
4	8.61	.00	.00	.02	.22	.79	.08
5	10.44	.19	.14	.05	.67	.21	.00
6	14.40	.74	.83	.01	.00	.00	.02
Tolerance			.71	.65	.77	.70	.64
VIF			1.41	1.53	1.30	1.43	1.57

As shown in Table 5-6, there is no evidence of any serious multi-collinearity between the independent variables of materialism (M), status consumption (SC), money as a motivator (MM), impulsive buying (IB) and social comparison (SOC), given that the last root has a condition index below 0.30 and none of the factors have more than one variance proportion greater than 0.50 (Field, 2009:242). Furthermore, tolerance values show the amount of variance in the independent variable not accounted for by the remaining independent variables. Here, the formula $1-R^2$ is used. Tolerance levels of 0.10 or less are problematic and variance inflation factor (VIF) values of 10 or more are problematic (Orme & Combs-Orme, 2009:27).

5.10 NOMOLOGICAL VALIDITY

The correlation analysis tests the nomological validity of a model by measuring the strength of the relationship between two constructs (Hair *et al.*, 2010:710). In order to test for nomological validity, a matrix of Pearson's Product-moment correlation coefficients (r) was constructed, as reported in Table 5-7.

Table 5-7: Correlation matrix

	M	SC	MM	IB	SOC	CA
Materialism						
Status consumption	.384**					
Money as a motivator	.384**	.368**				
Impulsive buying	.378**	.446**	.284**			
Social comparison	.413**	.487**	.340**	.429**		
Credit attitude	.233**	.194**	.223**	.258**	.240**	
Credit intention	.251**	.254**	.187**	.285**	.339**	.467**

**Correlation is significant at the $p \leq 0.01$ level (2-tailed)

As shown in Table 5-7, all of the correlation coefficients were significant ($p \leq 0.01$) and positive, with the strongest being between status consumption and social comparison ($r = 0.487$, $p < 0.01$) and between attitude towards credit and credit intentions ($r = 0.467$, $p < 0.01$). This suggests that the constructs proposed for inclusion in the measurement model

exhibit nomological validity. This was to be expected as all of the constructs are closely related and previous studies have also found a strong connection between them (Harnish *et al.*, 2018:194; Nga *et al.*, 2011:245; Fitzmaurice & Comegys, 2006:298).

5.11 HYPOTHESES TESTING

Hypothesis testing was undertaken whereby the significance level was again set at the $\alpha=0.01$ level and the decision rule applied was as follows:

If P-value $\geq \alpha$, then conclude Ho

If P-value $< \alpha$, then conclude Ha

Ho1: Determinants of credit usage intentions is not a seven-factor structure consisting of materialism, status consumption, money as a motivator, impulsive buying, social comparison, attitude towards credit and credit usage intentions.

Ha1: Determinants of credit usage intentions is a seven-factor structure consisting of materialism, status consumption, money as a motivator, impulsive buying, social comparison attitude towards credit and credit usage intentions.

Ho2: Materialism does not have a direct significant positive influence on Generation Y students' attitude towards credit.

Ha2: Materialism does have a direct significant positive influence on Generation Y students' attitude towards credit.

Ho3: Status consumption does not have a direct significant positive influence on Generation Y students' attitude towards credit.

Ha3: Status consumption does have a direct significant positive influence on Generation Y students' attitude towards credit.

Ho4: Money as a motivator does not have a direct significant positive influence on Generation Y students' attitude towards credit.

- H α 4: Money as a motivator does have a direct significant positive influence on Generation Y students' attitude towards credit.
- H α 5: Impulsive buying does not have a direct significant positive influence on Generation Y students' attitude towards credit.
- H α 5: Impulsive buying does have a direct significant positive influence on Generation Y students' attitude towards credit.
- H α 6: Social comparison does not have a direct significant positive influence on Generation Y students' attitude towards credit.
- H α 6: Social comparison does have a direct significant positive influence on Generation Y students' attitude towards credit.
- H α 7: Attitude towards credit does not have a direct significant positive influence on Generation Y students' credit usage intentions.
- H α 7: Attitude towards credit does have a direct significant positive influence on Generation Y students' credit usage intentions.
- H α 8: Male and female Generation Y students do not differ in their attitude towards credit.
- H α 8: Male and female Generation Y students do differ in their attitude towards credit.
- H α 9: Male and female Generation Y students do not differ in their credit usage intentions.
- H α 9: Male and female Generation Y students do differ in their credit usage intentions.

5.12 STRUCTURAL EQUATION MODELLING

In Section 5.12 the model proposed at the end of Chapter 3 is discussed. The first section contains the confirmatory factor analysis used to test the theory on which the empirical objectives of this study were based.

5.12.1 Measurement model specifications

A measurement model was developed to test the first hypothesis, Ho1 based on the third empirical objective. The measurement model specified for testing includes seven factors, namely materialism (M), status consumption (SC), money as a motivator (MM), impulsive buying (IB), social comparison (SOC), credit attitude (CA) and credit intentions (CI). This model is illustrated in Figure 5-14.

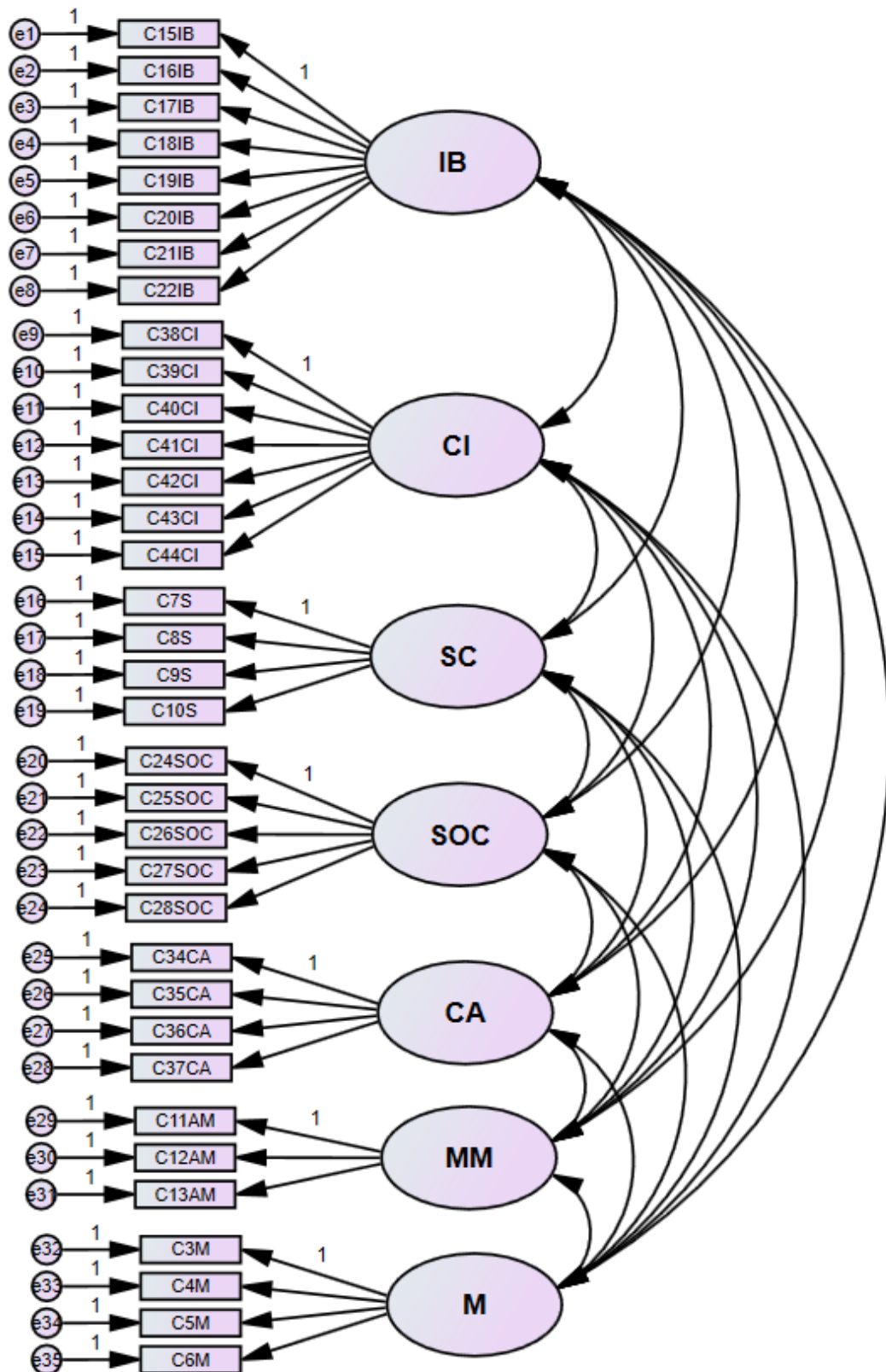


Figure 5-14: Confirmatory factor analysis

For model identification purposes, a 1.0 was assigned at random for each of the seven factors. The model had 630 distinct sample moments and 91 parameters to estimate, leaving 539 degrees of freedom (df) based on the over-identified model and a chi-square value of 1363.935 with a probability level equal to $p=0.000$.

The standardised factor loading estimates and error variance estimates, together with the correlation coefficients, Cronbach alphas (α), CR, AVE and squared-root AVE values are outlined in Table 5-8.

Table 5-8: Standardised coefficient estimates

Latent factors	Item	Factor loadings	Error variance	α	CR	AVE	$\sqrt{\text{AVE}}$
Materialism (M)	C3	.612	.375	.711	.713	.5	.71
	C4	.592	.351				
	C5	.660	.436				
	C6	.611	.373				
Status consumption (SC)	C7	.806	.650	.886	.887	.5	.71
	C8	.849	.720				
	C9	.822	.675				
	C10	.775	.600				
Money as a motivator (MM)	C11	.770	.592	.790	.801	.5	.71
	C12	.864	.746				
	C13	.626	.391				
Impulsive buying (IB)	C15	.609	.371	.861	.852	.5	.71
	C16	.747	.558				
	C17	.789	.622				
	C18	.698	.487				
	C19	.642	.412				
	C20	.604	.365				
	C21	.642	.412				
C22	.563	.317					

Table 5-8: Standardised coefficient estimates (continued ...)

Latent factors	Item	Factor loadings	Error variance	<i>a</i>	CR	AVE	√AVE
Social comparison (SOC)	C24	.786	.618	.846	.852	.5	.71
	C25	.745	.555				
	C26	.851	.724				
	C27	.673	.452				
	C28	.586	.344				
Credit attitude (CA)	C34	.712	.507	.797	.798	.5	.71
	C35	.673	.453				
	C36	.748	.560				
	C37	.686	.470				
Credit intentions (CI)	C38	.711	.505	.871	.873	.5	.71
	C39	.726	.527				
	C40	.659	.434				
	C41	.564	.318				
	C42	.771	.594				
	C43	.721	.520				
	C44	.764	.583				
Correlations	M<-->SC:.475	M<-->MM:.486	M<-->IB:.466	M<-->SOC:.501			
	M<-->CA:.315	M<-->CI:.315	SC<-->MM:.421	SC<-->IB:.522			
	SC<-->SOC:.536	SC<-->CA:.239	SC<-->CI:.288	MM<-->IB:.323			
	MM<-->SOC:.373	MM<-->CA:.290	MM<-->CI:.216	IB<-->SOC:.489			
	IB<-->CA:.297	IB<-->CI:.308	SOC<-->CA:.274	SOC<-->CI:.364			
	CA<-->CI:.561						

The model was assessed for any problematic estimates, such as negative error variances and any standardised factor loadings below -1.0 or above 1.0 (Hair *et al.*, 2010:706). There were no problematic estimates in the model.

As shown in Table 5-8, the association between each of the indicators and their respective latent factor was statistically significant ($p \leq 0.01$). In terms of reliability, all Cronbach alphas were above 0.7, suggesting internal-consistency reliability and all CR values were greater than the recommended 0.70, indicating that the factors also exhibit construct reliability. Convergent validity is also evident given the CR values above 0.7, factor loading estimates above 0.50 and AVE equal to 0.50 (Hair *et al.*, 2010:709). All the correlation coefficients were smaller than the squared-root of the AVE ($\sqrt{0.5}=0.71$), which is evidence of discriminant validity (Malhotra, 2018:676).

Despite a significant chi-square value, the other fit indices suggest an acceptable degree of fit between the measurement model and the data, with a SRMR of 0.048, a RMSEA of 0.05, an IFI of 0.915, a CFI of 0.914 and a TLI of 0.905.

The specified measurement model demonstrated acceptable reliability, both in terms of internal-consistency reliability and composite reliability. In addition, there was evidence of construct validity, including convergent, discriminant and nomological validity. Furthermore, the model exhibits an acceptable fit.

As such, the evidence in this sample infers that the null hypothesis, H_01 be rejected and the alternative hypothesis, H_{a1} concluded. That is, the determinants of Generation Y students' credit usage intentions is a seven-factor structure consisting of materialism, status consumption, money as a motivator, impulsive buying, social comparison, attitude towards credit and credit usage intentions.

5.12.2 Structural models

The fourth empirical objective formulated in Chapter 1 is addressed in this section. In the initial structural model (Structural Model A), it was hypothesised that attitude towards credit (CA) acts as a mediator between materialism (M), status consumption (SC), money as a motivator (MM), impulsive buying (IB) and social comparison (SOC) and credit intentions (CI). In other words, it was theorised that materialism (M) (H_{a2}), status

consumption (SC) (Ha3), money as a motivator (MM) (Ha4), impulsive buying (IB) (Ha5) and social comparison (SOC) (Ha6) have a direct positive influence on Generation Y students' attitude towards credit (CA), which, in turn, has a direct positive influence on their credit intentions (CI) (Ha7).

The regression path estimates for structural model A are depicted in Figure 5-15.

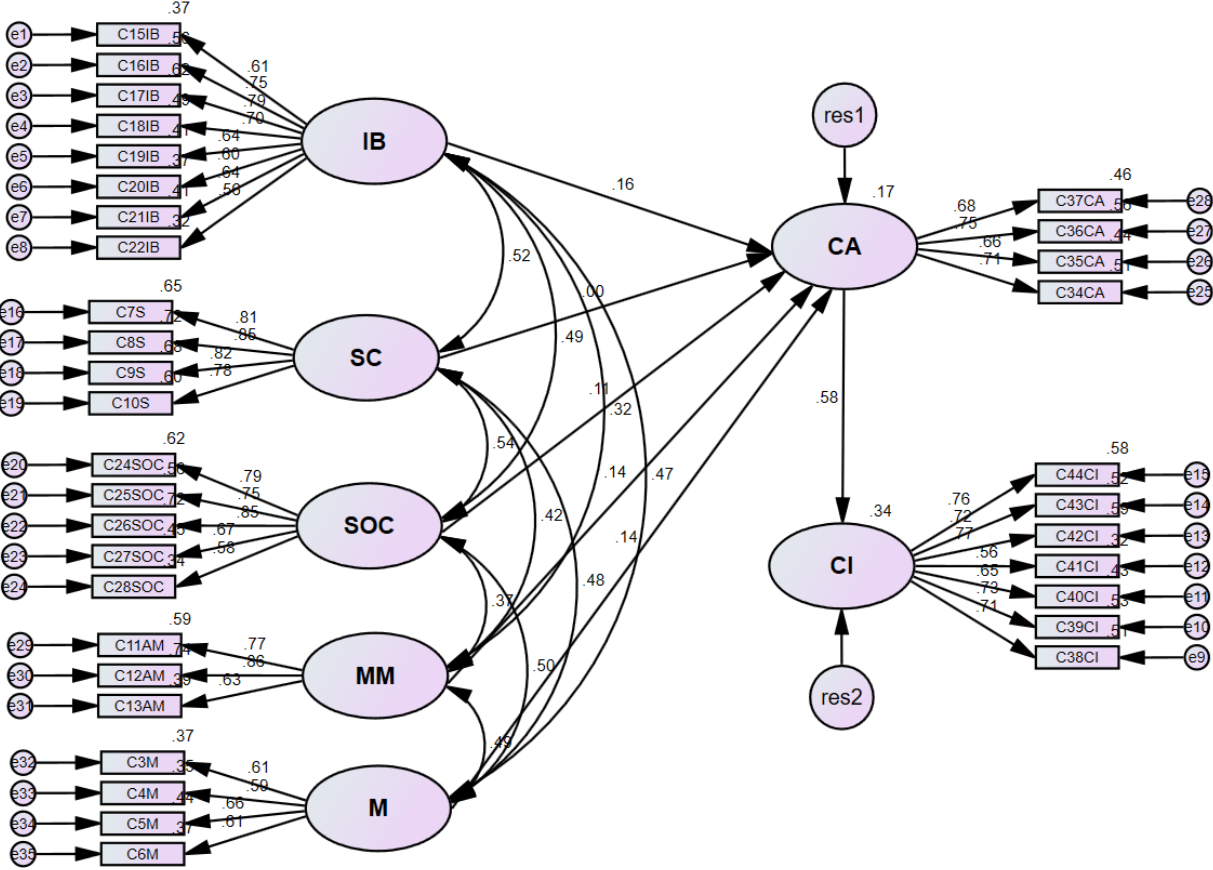


Figure 5-15: Model A

Despite Structural Model A having a significant chi-square (1399.094; df=544; p < 0.01) value, the other model fit indices indicated acceptable model fit indices, with a SRMR of 0.06, a RMSEA of 0.05, an IFI of 0.911, a CFI of 0.911 and a TLI of 0.903. This model also produced an AIC of 1571.094 and a CAIC of 2039.426.

In terms of the regression paths, only two statistically significant (p ≤ 0.01) paths were computed in Structural Modal A. Impulse buying (IB) had a statistically significant positive

influence on attitudes towards credit ($\beta = 0.156$; $p = 0.009 < 0.01$) and attitudes towards credit (CA) had a statistically significant positive influence on credit usage intentions (CI) ($\beta = 0.581$; $p = 0.000 < 0.01$). As such, Ho5 and Ho7 are rejected and their alternatives, Ha 5 and Ha 7, concluded. The significant path between attitudes towards credit and credit usage intentions corresponds to the theory of reasoned action and theory of planned behaviour which proposes that attitude will determine intentions (Fishbein & Ajzen, 1975:510; Madden *et al.*, 1992:3).

The paths between materialism (M) ($\beta = 0.143$; $p = 0.044 > 0.01$), status consumption (SC) ($\beta = -0.002$; $p = 0.980 > 0.01$), money as a motivator (MM) ($\beta = 0.139$; $p = 0.016 > 0.01$), social comparison (SOC) ($\beta = 0.112$; $p = 0.067 > 0.01$) and credit attitude (CA) were all statistically non-significant at the 0.01 level. This means that there is insufficient evidence to reject the null hypotheses - Ho2, Ho3, Ho4 and Ho6.

As is the convention, an alternative model was then specified based on the results of the first model and according to existing literature. In Structural Model B, it was theorised that materialism (M) and status consumption (SC) influence attitude towards credit (CA) via their influence on money as a motivator (MM), while impulse buying (IB) and social comparison (SOC) influence attitude towards credit (CA) directly, which, in turn, influences credit usage intentions (CI).

The regression path estimates for Structural Model B are depicted in Figure 5-16.

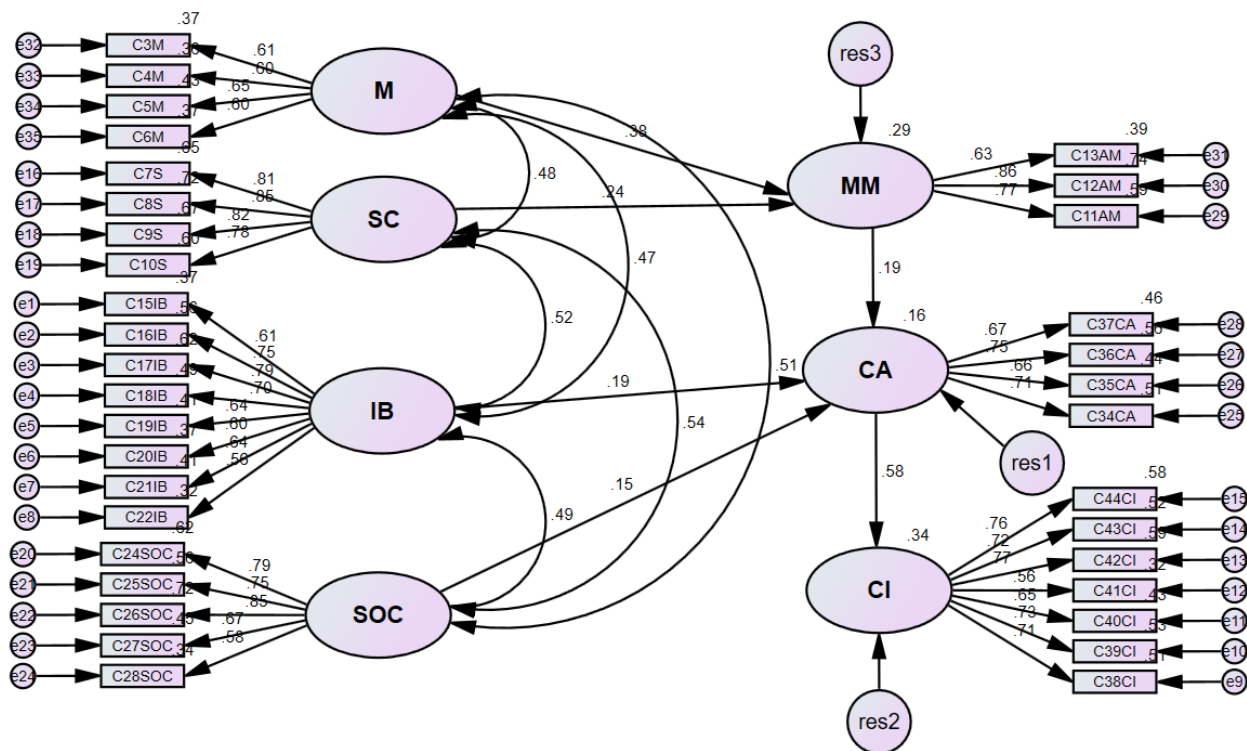


Figure 5-16: Model B

As was the case with Structural Model A, Structural Model B had a significant chi-square (1405.576; df=548; $p < 0.01$) value. That being said, the other model fit indices indicated acceptable model fit, with a SRMR of 0.06, a RMSEA of 0.05, an IFI of 0.911, a CFI of 0.911 and a TLI of 0.903. This structural model produced an improved AIC of 1569.576 and a CAIC of 2016.125.

According to the regression paths depicted in Figure 5.17, materialism (M) ($\beta = 0.384$; $p = 0.000 < 0.01$) and status consumption (SC) ($\beta = 0.241$; $p = 0.000 < 0.01$) have a statistically significant influence on money as a motivator (MM), which has a statistically significant influence on attitude towards credit (CA) ($\beta = 0.189$; $p = 0.000 < 0.01$). Both impulse buying (IB) ($\beta = 0.188$; $p = 0.000 < 0.01$) and social comparison (SOC) ($\beta = 0.154$; $p = 0.005 < 0.01$) have a statistically significant influence on attitude towards credit (CA). Attitude towards credit (CA) ($\beta = 0.580$; $p = 0.000 < 0.01$) then has a statistically significant influence on credit usage intentions (CI).

In terms of the squared multiple correlation (SMC) coefficient, collectively, the predictors explain 34 percent of the variance in Generation Y student' credit usage intentions.

Table 5-9 provides a comparison of the fit indices between Structural Models A and B.

Table 5-9: Comparison of the fit indices of Structural Models A and B

Measures	Recommended value	Model A	Model B
Chi-square	Non-significant	1399.094	1405.576
CFI	≥0.90	0.911	0.911
IFI	≥0.90	0.911	0.911
TLI	≥0.90	0.903	0.903
SRMR	≤0.08	0.06	0.06
RMSEA	≤0.80	0.05	0.05
AIC	Smallest positive values	1571.094	1569.576
CAIC	Smallest positive values	2039.426	2016.125

As shown in Table 5-9 whilst, the fit indices for Structural Model B remained largely unchanged from those in Structural Model A, the AIC and CAIC indices for Model B were lower than those for Model A, indicating that the revised model fits the data better than the hypothesised model.

Therefore, it appears that materialism and status consumption tendencies influence Generation Y students' attitude towards money, which, together with impulse buying and social comparison tendencies, influences their attitude towards credit and consequent credit usage intentions.

In the following section, an independent samples t-test is used to determine whether male and female Generation Y students differ on any of these constructs.

5.13 TWO INDEPENDENT SAMPLES T-TEST

This section contains the results of the independent samples t-test, which was conducted to test Ho8 and Ho9, in accordance with the last empirical objective formulated in Chapter 1. The significance level was set at $\alpha=0.01$. The results are reported in Table 5-10.

Table 5-10: Gender differences

Construct	Male mean	Male Std. Dev.	Female mean	Female Std. Dev.	t-value	p-value	Cohen's D
Credit Attitude	3.3713	1.28727	3.2661	1.20331	1.049	0.294	---
Credit Intentions	3.0346	1.26323	2.9060	1.21143	1.290	0.197	---

As is evident from Table 5-10, there is no statistically significant ($p \leq 0.01$) difference between male and female Generation Y students' attitudes towards credit or credit usage intentions. Therefore, there is insufficient evidence to reject Ho8 and Ho9.

5.14 CONCLUSION

This chapter discussed the findings of the empirical component of the study. The results from the pilot test revealed that all of the constructs except one had Cronbach's alpha values above 0.7 and all items were within the recommended inter-item correlation range of 0.15 and 0.5 except two, which were slightly higher, thereby providing an initial indication that the measuring scale exhibited reliable internal-consistency. Section A, which investigated the demographics established that the sample resembles the demographics of South African Generation Y students.

The exploratory factor analysis resulted in the extraction of seven factors as predicted and each of the extracted factors aligned well with the factors specified from the literature. Confirmatory factor analysis confirmed that Generation Y students credit usage intentions can be explained by a seven-factor model. The model exhibited internal-consistency and composite reliability, construct validity and acceptable model fit.

A path model was then proposed based on the literature that proposed that credit attitude acts as a mediator for credit intentions. While the path between attitudes towards credit and credit usage was statistically significant, the paths between materialism, status consumption, money as a motivator, social comparison and credit attitude (CA) were all statistically non-significant at the 0.01 level. As a result, this model was discarded and an alternative model specified. The revised structural model found that materialism and

status consumption have a statistically significant influence on money as a motivator, which has a statistically significant influence on attitude towards credit. Both impulse buying and social comparison have a statistically significant influence on attitude towards credit (CA). Attitude towards credit then has a statistically significant influence on credit usage intentions. The revised model also had improved AIC and CAIC fit indices. Generation Y students also exhibited no gender differences in terms of their attitude towards credit and credit usage intentions.

The following chapter provides the conclusions of and recommendations from the study.

CHAPTER 6

CONCLUSION AND RECOMMENDATIONS

6

6.1 INTRODUCTION

Credit providers constantly expose consumers to marketing. To many people, credit is a way to improve their lives. It gives access to emergency funds, allows consumers to buy products that will raise their standard of living, allows students to fund their education and entrepreneurs to start companies – however to many, it is also a trap from which they cannot escape. Globally, consumer credit has increased dramatically over the past century and this increase has been accelerating over the last three decades. Most children today grow up in households where parents are indebted and often struggling to keep up. This normalises debt and 86 percent of South Africans older than 15 now hold some type of debt, be it from stores, banks, family or micro lenders (Nzukuma, 2017).

Current research shows that up to 73 percent of South African households are experiencing financial difficulty (Smith, 2018b). This situation is likely to become worse as GDP growth (2017) slows to 1 percent while unsecured lending is growing by 5 percent year on year (Absa, 2018; Lamprecht, 2018). Not only is keeping up with debt repayment challenging for many individuals, it is also creating social unrest as workers push for higher wages to repay their debts. That being said, credit is here to stay and consumers, credit providers and government will have to reconsider how debt is managed to ensure that economic growth is not slowed, while at the same time consumers are not dragged down by excess debt.

Consumer behaviour and the consumer decision-making process is influenced and determined by psychological factors and group factors. Group factors are the result of interactions with others such as family, peers and reference groups (Kreng & Huang, 2011:535; Mostert & Du Plessis, 2007:91). Psychological factors include perceptions, motivation, beliefs, knowledge and attitudes (Mott, 2018). The theory of planned behaviour states that generally speaking, “people intend to perform a behaviour when they evaluate it positively, when they experience social pressure to perform it and when

they believe that they have the means and opportunities to do so” (Ajzen, 2005:117-119). Behavioural beliefs shape a person’s attitude towards performing a behaviour. Attitudes, in turn, affect the intention to perform the given behaviour and those intentions serve as the primary antecedents of the behaviour (Fishbein & Ajzen, 1975:510; Madden *et al.*, 1992:3).

The goal of this study was to determine whether the psychological tendencies identified in the literature influenced the participants’ attitude towards credit and whether attitude towards credit acted as an antecedent to credit usage intentions. From the available literature, the following predictors were identified, namely materialism, status consumption, impulsive buying, social comparison, money as a motivator and credit attitude.

6.2 OVERVIEW OF THE STUDY

South Africa, like many other countries, is experiencing credit growth that far outstrips GDP growth (Absa, 2018; Lamprecht, 2018). Although credit growth has many positives, many consumers find themselves in a situation where they are unable to meet their obligations (Smith, 2018a). Students, in particular, are vulnerable to aggressive marketing by credit providers (Nga *et al.*, 2011:245). This is due to a multitude of factors, including their lack of knowledge and experience and peer pressure to consume (Leclerc, 2012:149; Finney *et al.*, 2007:34; 35). There are also internal drivers that may influence a students’ decision to use credit such as materialism and status consumption (Duh, 2014:974; Cronje *et al.*, 2016:754). The growth in consumer credit along with the problems this has created is discussed in Section 1.1 and the problem statement is to be found in Section 1.2. The study objectives, based on the problem statement, are described in Section 1.3. These include the primary objectives, the theoretical objectives, the empirical objectives and the nine hypotheses based on the empirical objectives. This is followed by an overview of the research methodology used to achieve the empirical objectives in Section 1.4. The chapter concludes with the ethical considerations, theoretical framework, demarcation and contribution of study.

Chapter 2 contained a discussion concerning credit. The chapter starts with a revision of the history of consumer credit and how it gained popular acceptance (Section 2.2 and

2.3). As this history goes back almost 4 000 years, only certain highlights are touched on such as the first codification of laws governing credit and the foundation of the modern financial system during the Middle Ages. In addition, credit played a role ushering in the industrial revolution by increasing consumer demand, as more productive industries increased the supply of consumer goods. In Section 2.4, the ways in which credit has become an essential part of the modern economy and contributes to raising the living standards of many people who would otherwise remain trapped in poverty are examined. This was largely made possible by improvements in technology, as discussed in Section 2.5. The characteristics of the South African consumer credit market are discussed in Section 2.6 along with the most relevant sources of credit for Generation Y students in South Africa in Section 2.7 and consumer over-indebtedness in Section 2.8. Chapter 2 concludes with student credit use in Section 2.9 and an introduction into the concept that non-economic forces also shape credit use in Section 2.10.

Chapter 3 is a discussion on South African Generation Y students and the attitudes that shape their credit use. In order to understand the Generation Y cohort, the unique circumstances that shaped their views and behaviour are examined in Section 3.2. This is done both globally, in the context of globalisation and the information age, in Section 3.3 and locally, in Section 3.4, considering that Generation Y students are part of the so called born frees, the first generation born after the fall of apartheid and under the new democratic dispensation. In Section 3.5, the relevant psychological tendencies and attitudes that shape credit usage intentions are discussed based on previous research. These included materialism, status consumption, money as a motivator, impulsive buying, social comparison and attitude towards credit. In Section 3.6, a model of the determinants of Generation Y students' credit usage intentions is proposed.

Chapter 4 explains the approach and research methodology followed to reach the empirical objectives of this study. The research design is described in Section 4.2. This study followed a conclusive descriptive research design using a single cross-sectional approach in which information was gathered from one sample of participants drawn from the target population used in the study only once. Section 4.3 discusses the sampling design procedure that was followed in this study. The target population is defined in Section 4.3.1 as being Generation Y students, between the ages of 18 and 26 years,

enrolled at South African registered public HEIs in 2017. The sampling frame for this study is described in Section 4.3.2 and Section 4.3.3 outlines the sample procedure. Section 4.3.4 discussed why a sample size of 700 participants was chosen, based on the statistical analysis techniques used. The research instrument used was a self-administered questionnaire based on validated scales from previous studies, which is described in Section 4.4. Section 4.5 describes the administration of the questionnaire and Section 4.6 the data preparation process. Next, Section 4.7 discusses all of the statistical analysis techniques used to reach the empirical objectives set out in Chapter 1. Following the research methodology outlined in Chapter 4, Chapter 5 reports on the analysis and interpretation of the data gathered from the selected participants. The results address the five empirical objectives formulated in Chapter 1 of the study. The results from the pilot test are discussed in Section 5.2, followed by a description of the data gathering process in Section 5.3 and the preliminary data analysis in Section 5.4. Section 5.5 is a description of the demographic profile of the participants to establish that they resemble the target population. Section 5.6 describes the actual credit use by the participants, including how many use credit, their reasons for using credit and if they are struggling to repay their debt. Section 5.7 reports on the exploratory factor analysis, whereby the seven factors predicted by the literature were extracted. In Section 5.8, a description of the mean, standard deviation, variance, skewness and kurtosis values of the data are given. The multi-collinearity assessment is in Section 5.9. The nomological validity proposed for inclusion the model developed in this study is discussed in Section 5.10. Given that there was a statistically significant positive correlation between each pair of latent factors in the proposed model, the model was deemed suitable for structural equation modelling. Section 5.11 repeats the various hypotheses for this study presented in Chapter 1. Thereafter, the confirmatory factor analysis and path model results are reported in Section 5.12. Section 5.13 compares the male and female participants' attitude towards credit and credit usage intentions.

In the following section, the main findings of the study are discussed.

6.3 MAIN FINDINGS OF THE STUDY

This section is a discussion on the research findings based on the empirical objectives formulated in Section 1.3.3 of Chapter 1.

The first empirical objective was to determine Generation Y students' actual credit use, including the types of credit used, sources of income credit purchases, debt management, reasons for credit use, credit applications and financial concerns. It was determined that 73 percent of the participants were dependent on parents, family and friends as their main source of income. This is lower than previous studies which found that 85 percent of students are dependent on parents, family and friends (Anon, 2017d). Credit was also common among the students with 71 percent of the participants using some form of credit, mainly NSFAS loans. Of the participants' 48 percent indicated that they use NSFAS. This corresponds closely with NSFAS claims that 45 percent of South African students depend on NSFAS funds for their studies (Shezi, 2017; Gumede, 2016).

Textbooks, clothes, cell phones and groceries made out the majority of credit purchases. Previous studies had similar results with clothing being students' biggest expense (Anon, 2017d). Only 16 percent of participants indicated having problems repaying their loans. Most students were concerned about financing their tuition, 51 percent were concerned with class fees, 36 percent with accommodation and 33 percent with textbooks.

The second empirical objective sought to determine Generation Y students' materialism, status consumption, social comparison and impulsive buying tendencies and their attitude towards money and credit and credit usage intentions in the South African context. The computed results suggest that Generation Y students have materialistic tendencies, are motivated by money and have a moderately positive attitude towards credit. This is similar to findings by Duh *et al.* (2015:259) who postulated that materialism is one method by which South African youth cope with family disruptions. That being said, they do not appear to have social comparison, status consumption or impulse buying tendencies. In addition, they also do not seem to have strong credit usage intentions.

The third empirical objective was to test whether credit usage intentions amongst Generation Y students is a seven-factor structure consisting out of materialism, status consumption, money as a motivator, impulsive buying, social comparison attitude towards credit and credit usage intentions. The results of the confirmatory factor analysis indicate that the determinants of Generation Y students' credit usage intentions is indeed a seven-factor structure. In addition, the model exhibits acceptable internal-consistency and composite reliability, together with construct validity and acceptable model fit.

The fourth empirical objective was to test the influence of materialism, status consumption, social comparison, impulsive buying, money as a motivator and attitude towards credit on credit usage intentions among Generation Y students using path analysis. In the original model it was predicted that materialism, status consumption, impulsive buying, social comparison, money as a motivator and credit attitude would all have a significant direct positive influence on credit attitude, which, in turn, would be a significant positive predictor of credit intentions. While the path between attitudes towards credit and credit usage intentions was statistically significant, the paths between materialism, status consumption, money as a motivator, social comparison and credit attitude were not statistically significant. As such, this model was discarded and an alternative model specified. A revised structural model was then specified, which found that materialism and status consumption tendencies influence Generation Y students' attitude towards money, which, together with impulse buying and social comparison tendencies, influences their attitude towards credit and consequent credit usage intentions. The revised model also had improved AIC and CAIC indices, indicating an improved model.

This improved model is depicted in Figure 6-1.

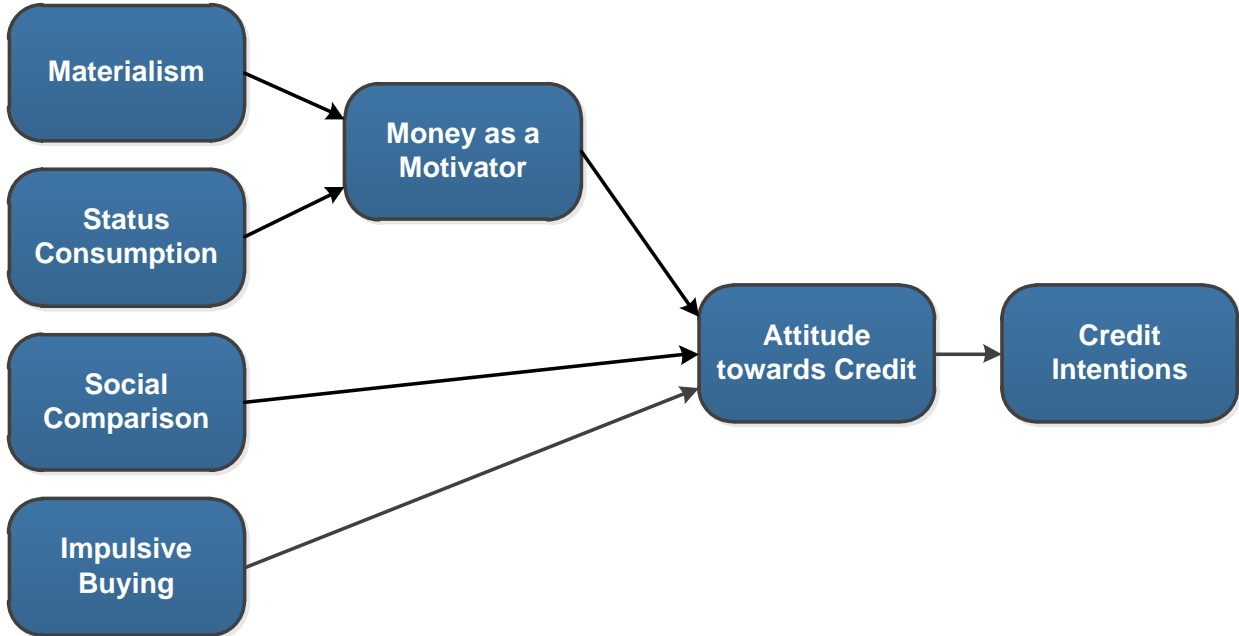


Figure 6-1: Model of the attitudes that determine credit usage intentions among Generation Y students

Previous studies have had similar findings. People judge their own lives and that of others by their income and possessions. Financially successful people are associated with positive qualities while less successful people are associated with negative qualities such as being maladjusted and unhappy (Furnham, 1984:501). Research shows consumers evaluate their own success and possessions by comparing themselves to others (Tiggemann et al., 2018:91; Yoon et al., 2016:801; 802). Thus people from a lower socioeconomic status, from unequal societies or who grow up feeling disadvantaged, escape feelings of inadequacy by embracing materialistic values and goals (Kim *et al.*, 2017:373; Watson, 2015:134). They also spend money on status and luxury products to improve their image. This spending is also often financed by going into debt (Ordabayeva & Chandon, 2010:27). This may be why materialism is an important variable in predicting a consumer's propensity for incurring debt (Ponchio & Aranha, 2008:21). Thus inequality may lead to greater materialism and status consumption which in turn leads to greater indebtedness.

The fifth empirical objective was to determine the influence gender has on Generation Y students' attitude towards credit and credit usage intentions. The findings indicate that there are no statistically significant differences between males and females concerning their attitude towards credit and credit usage intentions.

The following section outlines the contribution made by the study.

6.4 CONTRIBUTION OF THE STUDY

Credit plays an essential role in the economy in that it allows consumers to purchase products and services they cannot ordinarily afford and thus stimulates economic growth. However, credit may also become a heavy burden, as discussed earlier, as many consumers become over-indebted, which then traps them in a debt spiral from which it becomes difficult to escape. Generation Y students were chosen as the target population since Generation Y makes up 35 percent of the South African population and although many are unemployed those who successfully finish their studies will have a higher future earning potential as well as a higher social status within their communities (Statistics South Africa, 2018; Van der Merwe *et al.*, 2018; Noble *et al.*, 2009:617).

According to the theory of planned behaviour, attitudes determine intentions and intentions leads to behaviour. This study aimed to determine the effect materialism, status consumption, social comparison, impulsive buying and money as a motivator has on attitude towards credit and how attitude towards credit, in turn, determine credit usage intentions among Generation Y students. The results of the path analysis in structural equation modelling were that impulsive buying, social comparison and money as a motivator have a significant direct positive influence on credit attitude, which in turn have a significant direct positive influence on credit usage intentions. This is supported by the literature. Not only are modern consumers much more positively disposed towards credit than in the past, children have also grown up seeing their parents using credit normalising being indebted early on. Impulsive buyers also tend to have a more positive view of credit, as it allows them to indulge in impulsive spending, as do people who are more motivated by money. The results also show that that materialism and status consumption have a significant direct positive influence on money as a motivator, which then, in turn, influences attitude towards credit. This seems logical given that both materialistic and status consumption tendencies are likely to create a more positive attitude towards money as money is the very instrument required to satisfy these two tendencies. Unfortunately, this also leads to a more positive attitude towards credit.

This study confirms the findings of previous studies which linked materialism, status consumption, social comparison, attitude towards money and impulsive buying towards a greater propensity towards becoming indebted (Harnish *et al.*, 2018:190; Chipp *et al.*, 2011:130; Palan *et al.*, 2011:90; Robb & Sharpe, 2009:26; Ponchio & Aranha, 2008:21). Although these and other studies have linked these constructs to credit use this is the first model to combine all of the constructs in one working model. It also suggests that the growing levels of inequality may be contributing to the growing number of over-indebted consumers.

It is essential to the economy and for sustainable economic growth that South African consumers develop healthy credit patterns. To do this several things will need to be done. Firstly the financial literacy levels of South African consumers will have to be increased. Previous research has shown that while financial literacy does not always act as a deterrent towards debt it may allow consumers to choose better and more affordable

financial options (Rootman & Antoni, 2015:474; Hogarth, 2002:14). Secondly, the high level of inequality in South Africa will also have to be addressed. This can be done through education and economic growth. Education can also help in changing attitudes towards possessions and status consumption. The recommendations are discussed in more detail in the next section.

6.5 RECOMMENDATIONS

The life cycle theory holds that “consumption and savings decisions of households at each point in time reflect a more or less conscious attempt at achieving the preferred distribution of consumption over the life cycle, subject to constraints imposed by resources accruing to the household over its lifetime” (Hurwitz & Luiz, 2007:110; 130; Davies & Lea, 1995:663). Students grow up accustomed to a certain lifestyle provided by their parents. They expect higher future earning and believe the lower income levels they are experiencing are temporary. Therefore, they are willing to use credit to maintain their spending (Hurwitz & Luiz, 2007:110; 130; Davies & Lea, 1995:663). However, excessive debt becomes a barrier to many in completing their degrees and the effects of being over-indebted, such as being blacklisted, can impede their employability. In accordance with the findings of the current study, this section outlines several recommendations concerning Generation Y credit use. Another factor that appeared from the research is the effect of inequality. The theory of relative deprivation refers to dissatisfaction and resentment a person feels when he or she observes others enjoying outcomes they desire and feel that they are entitled to in life (Kim *et al.*, 2017:374). People deal with relative deprivation in various ways, increased credit use being one of them (Kim *et al.*, 2017:388). Therefore, people who feel deprived will buy products they cannot afford, with credit, which leaves them unable to repay their debts. Based on the findings of the study several recommendations can be made.

6.5.1 Monitor student credit use

Most participants reported that they were able to keep up with payments. The restructuring of NSFAS from loans to bursaries for students from households earning less than R350 000 per annum will potentially increase student participation (Mabuza, 2018). However, many students from poor households are still dependent on loans for expenses

like transport and accommodation. It would benefit universities to monitor student credit use to identify potential problems and trends in student credit use. This proactive approach may be able to identify problems early on and help prevent students from becoming over-indebted, which often becomes a barrier to student participants and increases attrition rates.

6.5.2 Use education to foster youth financial literacy

Both internal and external factors push students towards credit use. The findings indicate that several psychological tendencies increase students' credit usage intentions. Previous studies have explored student financial literacy and its effect on actual credit use. The results were that while financial education can assist students in making better financial decisions it does not lower credit use or prevent students from becoming over-indebted (Shapiro & Burchell, 2012:2; Lown, 2011:54).

Financial education will only lead to better financial decisions if students recognise the importance of it and apply the knowledge they gain. However, students are often apathetic and lack the motivation to seek financial knowledge. Educational courses also assist more in behavioural rather than attitudinal modifications. As such, students need to understand that their current financial decisions will have an impact on their future economic well-being and financial freedom. To foster greater engagement, financial literacy courses may also need a practical element such as preparing household budgets and comparing different financial products and their cost. Financial literacy courses should also equip students to find information on the different types of credit, lowest interest rates, penalty charges and reward programmes. Financial literacy will only contribute to responsible credit use if it leads to greater financial self-efficacy, which, in turn, may lead to self-control and financial discipline. Responsible spending will reduce the default rates and recovery costs for credit providers. As such, universities can work together with credit providers to develop and reinforce responsible credit usage among students. These collaborations make financial planning courses more relevant as well as provide independent and unbiased views on credit products. It may be necessary for financial literacy to be included in primary school education level and be a compulsory course for university students.

6.5.3 Implement government regulation

Many South Africans lack the knowledge and experience to make informed financial decisions. This leaves them vulnerable to exploitation and unethical marketing (Rampersad & Reddy, 2012:7407). This includes micro lenders charging extravagant rates and confiscating ID books and bank cards (Ryan, 2017; Hartley, 2015). In an effort to protect consumers from such unethical practices, the government has enacted the NCA (Kelly-Louw, 2008:200).

The NCA, generally, has been well received and has been credited with mitigating the damage from the 2008 recession (Marais, 2009; Ntingi, 2008). Complaints still surface about the financial industry, including reckless lending and exorbitant interest rates. This is mainly due to the lack of enforcement of existing laws and not necessarily indicative that more laws are needed (Hlatshaneni, 2018). Government should thus focus on enforcing existing laws first instead of adding more onerous laws that may discourage entrepreneurs and investment.

6.5.4 Encourage parental involvement in fostering financial literacy

Attitude towards money is shaped during a child's formative years. Lifestyle, upbringing and family structure all play a role in children's attitudes towards money and possession. Many children grow up in over-indebted homes where parents use credit to fund lifestyles they cannot afford. Other children grow up in homes where possession serve as a replacement for affection and parents indulge children and create unrealistic expectations (Britt, 2016:543; Ungerer, 2014:1). It is often not until they start working and earning money that Generation Y starts taking any responsibility for their personal finances. Parents want the best for their children and this should include being financially empowered and equipped to make the right financial decisions. This involves parents not only setting a responsible example and teaching children the necessary skills but also material and social attitudes that do not judge an individual's value and success based on material possessions.

6.5.5 Encourage ethical behaviour by credit providers

Credit providers see students as an attractive market due to their higher future earning potential and their role as trendsetters and influencers (Noble *et al.*, 2009:617). This has promoted credit providers to design several products aimed specifically at students, not only traditional student loans but also credit cards and store cards (Goko, 2013). Many students are naïve and do not understand financial products or how compound interest can increase the amount they will have to repay. Very few students work for and earn their own money, with most being dependent on their parents who end up paying the debt the students incurred. Credit providers need to ensure students first, understand the credit products they are choosing and secondly, are able to repay their debt. This should be a more profitable long-term strategy than burdening students with the highest amount of debt they are allowed and then struggling to collect the debt.

6.5.6 Encourage informal support network for university students

Students are often hesitant to ask financial advice from credit providers and few have access to financial advisors. Therefore, financial behaviour is often learnt through informal support networks such as family and friends. Family and friends are also often their primary source of information and parents often repay debts students incur. As such, students should seek out informal support groups, be it family, friends, employers or academic staff members who have the necessary skills to assist them in financial decision-making and provide guidance in circumstances where students lack experience or knowledge.

6.5.7 Decrease inequality

Inequality is a major driver of status consumption and credit use. People seek to project their social status and success by displays of wealth. As societal inequality increases status consumption increases and it is often the poor who can least afford it who engage in status consumption, often by borrowing (Chipp *et al.*, 2011:130). There are several ways in which inequality can be decreased but one of the most effective ways is by providing quality education to all children. Research indicates that higher educational attainment and a more equal distribution of education plays a significant role in lowering income inequality (Gregorio & Lee, 2002:395). Currently, estimates are that between 70

and 80 percent of schools are dysfunctional (Wilkinson, 2015). Children from dysfunctional schools are less likely to finish school or attend university and, thus, less likely to find employment. People with higher levels of education earn more and are less likely to be unemployed than those with less qualifications (Skosana, 2018; Spaul, 2016). Improving the education system will not only address inequality but also alleviate problems like unemployment, poverty and high crime levels.

6.6 LIMITATIONS AND FUTURE RESEARCH OPPORTUNITIES

This study measured the attitudes influence credit intentions among Generation Y students. This study had certain inherent limitations that may present several future research opportunities.

The primary limitation of this study is that it involved a cross-sectional study that employed a non-probability convenience sample of participants. While the scales have proved robust in previous studies attitudes may change over time and in response to situational factors. This suggests future research employing a longitudinal design may determine how attitudes towards credit use change over time and due to factors such as interest rate hikes. Although care was taken to ensure the participants were representative of the target population, care needs to be taken in generalising the results to the whole target population as this study employed non-probability convenience sampling. Furthermore, since the responses are self-reported, participants may deliberately or unintentionally volunteer incorrect information.

A comparative study on the same topic using student and non-student samples of young adults or an intergenerational study incorporating different generations could also yield valuable information on the credit usage intentions of South African consumers.

6.7 CONCLUSION

In conclusion, South Africa, like many other countries, has experienced a pro-consumer-credit shift, which shows no signs of abating. Although many consumers have benefited from easy credit, many become over-indebted and suffer the consequences. This study shows that there are several reasons for South Africans embrace of credit. First, there are practical considerations and many consumers use credit to access future income in

order to buy essentials such as food. Other consumers finance a higher standard of living in the expectation of a higher future income. Of course, many consumers also do so in response to the growing inequality. Research has shown that as inequality rises and relative deprivation increases people become more materialistic, more given to social comparison and more likely to engage in status consumption to improve their public image. Since many consumers cannot afford to do so, they turn to credit to finance their spending. This study shows that not only does credit attitude influence credit intentions as predicted by the theory of planned behaviour but also social comparison, people comparing their position and possessions to others. In order for the growth in consumer credit to be sustainable and beneficial much more needs to be done by credit providers, educators, parents and government to encourage healthy credit use.

BIBLIOGRAPHY

- Absa. 2018. Credit and mortgage advances 30 May 2018. [file:///C:/Users/11992069/Downloads/Credit%20and%20mortgage%20advances%20\(Apr%202018\).pdf](file:///C:/Users/11992069/Downloads/Credit%20and%20mortgage%20advances%20(Apr%202018).pdf) Date of access: 28 August 2018.
- Adams, T. & Moore, M. 2007. High-risk health and credit behaviour among 18- to 25-year-old college students. *Journal of American College Health*, 56:101–108.
- Adams, J. 2016. Student Loans Date Back to the Middle Ages. <http://time.com/4435208/student-loans-history-middle-ages/> Date of access: 11 September 2018.
- Agnew, S. & Harrison, N. 2015. Financial literacy and student attitudes to debt: a cross national study examining the influence of gender on personal finance concepts. *Journal of Retailing and Consumer Services*, 25:122–129.
- Ajzen, I. 1991. The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50:179–211.
- Ajzen, I. 2005. Explaining intentions and behaviour. Attitudes, personality and behaviour. McGraw-Hill Education: New York.
- Ahmad, S.Z. & Arif, A.M.M. 2015. Professional insights strengthening access to finance for women-owned SMMEs in developing countries. *Equality, Diversity and Inclusion*, 34:634–639.
- AloMadulid, F. 2018. Poverty reduction through microfinance loans assistance program in Catarman, Northern Samar. *International Journal of Multidisciplinary Approach and Studies*, 01:38–147.
- Anglo American. 2016. Shocker! South Africa's debt stats. <http://www.news24.com/PartnerContent/shocker-south-africas-debt-stats-20151204> Date of access: 29 May 2016.

Anon. 2008. Medieval Banking- Twelfth and Thirteenth Centuries. <https://ehistory.osu.edu/articles/medieval-banking-twelfth-and-thirteenth-centuries> Date of access: 11 September 2018.

Anon. 2013. Report indicates spiralling student debt. <http://www.enca.com/money/report-indicates-spiraling-student-debt> Date of access: 5 January 2014.

Anon. 2015a. How funding for university students has dwindled in South Africa. <http://businesstech.co.za/news/general/101776/how-funding-for-university-students-has-dwindled-in-south-africa/> Date of access: 24 April 2016.

Anon. 2015b. Here are South Africa's 26 universities. <http://businesstech.co.za/news/general/101412/here-are-south-africas-26-universities/> Date of access: 24 April 2016.

Anon. 2015c. Millions of consumers use small loans to buy food. <http://www.fin24.com/Economy/Millions-of-consumers-use-small-loans-to-buy-food-20150311> Date of access: 29 May 2016.

Anon. 2015d. Here are South Africa's 26 universities. <https://businesstech.co.za/news/general/101412/here-are-south-africas-26-universities/> Date of access: 14 March 2017.

Anon. 2015e. Know your credit score. <https://compuscan.global/newsroom/know-credit-score/> Date of access: 9 April 2018.

Anon. 2016a. Shocker! South Africa's debt stats. <http://www.news24.com/PartnerContent/shocker-south-africas-debt-stats-20151204> Date of access: 20 April 2017.

Anon. 2016b. How many SA households earn more than R200,000 per month. <https://businesstech.co.za/news/wealth/132507/how-many-households-in-south-africa-earn-more-than-r200000-per-month/> Date of access: 6 September 2017.

Anon. 2017a. Vumatel's uncapped 100Mbps fibre for R89 plan. <https://mybroadband.co.za/news/fibre/227477-vumatels-uncapped-100mbps-fibre-for-r89-plan.html> Date of access: 6 September 2017.

Anon. 2017b. These are the most and least popular loyalty reward programmes in South Africa. <https://businesstech.co.za/news/business/204770/these-are-the-most-and-least-popular-loyalty-reward-programmes-in-south-africa-2/> Date of access: 19 July 2018.

Anon. 2017c. Middle class is buckling under debt: survey. <http://www.enca.com/money/middle-class-is-buckling-under-debt-survey> Date of access: 19 July 2018.

Anon. 2017d. Where the students of 2017 are spending their money. <https://www.mediaupdate.co.za/marketing/134535/where-the-students-of-2017-are-spending-their-money> Date of access: 9 February 2019.

Anon. 2018a. What is a credit provider? <http://www.creditactofsouthafrica.co.za/whatisacreditprovider.html> Date of access: 25 June 2018.

Anon. 2018b. What you need to know about credit card debt in South Africa. <https://businesstech.co.za/news/finance/142934/what-you-need-to-know-about-credit-card-debt-in-south-africa/> Date of access: 16 July 2018.

Anon. 2018d. Why it could be much harder get a home loan in South Africa right now. <https://businesstech.co.za/news/property/256431/why-it-could-be-much-harder-get-a-home-loan-in-south-africa-right-now/> Date of access: 16 July 2018.

Anon. 2018e. Home loan approval highest in 10 years – ooba. <https://www.fin24.com/Economy/home-loan-approval-highest-in-10-years-ooba-20180426> Date of access: 16 July 2018.

Anon. 2018f. Here's how many smartphones were sold in South Africa in the first quarter of 2018. <https://businesstech.co.za/news/technology/249541/heres-how-many-smartphones-were-sold-in-south-africa-in-the-first-quarter-of-2018/> Date of access: 24 July 2018.

Anon. 2018g. South Africa debt clock. <https://www.nationaldebtclocks.org/debtclock/southafrica> Date of access: 30 August 2018.

Anon, 2018h. Debt hitting SA's single women harder. <https://www.fin24.com/Money/Debt/debt-hitting-sas-single-women-harder-20180813-2> Date of access: 28 September 2018.

Anon. 2018i. 23 June 2018: Latest education statistics from general household survey (GHS). <https://www.southafricanmi.com/education-statistics.html> Date of access: 4 October 2018.

Arias, M. & Yen, W. 2015. Recovery from the great recession has varied around the world. <https://www.stlouisfed.org/~media/Publications/Regional-Economist/2015/October/recession.pdf> Date of access: 9 July 2018.

Armstrong, M.A. 2018. Part I of IV—A brief history of world credit & interest rates. <https://www.armstrongeconomics.com/research/a-brief-history-of-world-credit-interest-rates/3000-b-c-500-a-d-the-ancient-economy/> Date of access: 13 August 2018.

Aron, J. & Meullbauer, J. 2013. Wealth, credit conditions and consumption: evidence from South Africa. *Review of Income and Wealth*, 59:161–196.

Appelgryn, A.M. & Bornman, E. 1996. Relative deprivation in contemporary South Africa. *Journal of Social Psychology*, 136(3):381-397.

Badenhorst, J. 2018. Students are still selling NSFAS bursary vouchers for cash. https://www.huffingtonpost.co.za/jan-badenhorst/students-are-still-selling-nsfas-bursary-vouchers-for-cash_a_23417990/ Date of access: 18 July 2018.

Babin, J.B. & Svensson, G. 2012. Structural equation modelling in social science research: Issues of validity and reliability in the research process. *European Business Review*, 24(4):320-330.

Bae, S. & Miller, J. 2009. Consumer decision-making styles for sport apparel: Gender comparisons between college consumers. *Journal of research in Health, Physical Education, Recreation, Sport and Dance*, 4(1):40-45.

- Bagozzi, R.P., Baumgartner, H. & Yi, Y. 1992. State versus action orientation and the theory of reasoned action: An application to coupon usage. *Journal of Consumer Research*, 18:505-518.
- Bagri, N.T. 2016. Over a billion people have been lifted out of poverty since 1990, but the next billion will be harder. <https://qz.com/798481/over-a-billion-people-have-been-lifted-out-of-poverty-since-1990-but-the-next-billion-will-be-harder/> Date of access: 11 June 2018.
- Baily, M.N. & Elloitt, D.J. 2009. The US financial and economic crisis: Where does it stand and where do we go from here. <https://www.brookings.edu/research/the-u-s-financial-and-economic-crisis-where-does-it-stand-and-where-do-we-go-from-here/> Date of access: 30 July 2014.
- Baker, R.D. 2014. The implausibility of the barter narrative & credit money in ancient Babylon. *The Developing Economist*, 1(1):1–3.
- Bakewell, C. & Mitchell, V. 2003. Generation Y female consumer decision-making styles. *International Journal of Retail & Distribution Management*, 13 (2):95-106.
- Barry, H. 2014. What credit information amnesty really means. <http://www.moneyweb.co.za/moneyweb-financial/what-credit-information-amnesty-really-means> Date of access: 4 August 2014.
- Beares, P. 2013. Consumer lending. American Bankers Association, Washington, DC.
- Belk, R.W. 1984. Three scales to measure constructs related to materialism: Reliability, validity, and relationships to measures of happiness. *Advances in Consumer Research*, 11:291-297.
- Belk, R. 1985. Materialism: trait aspects of living in the material world. *Journal of Consumer Research*, 12:265–280.
- Belk, R.W. 1995. Hyper-reality and globalization: Culture in the age of Ronald McDonald. *Journal of International Consumer Marketing*, 8(3/4):23–32.

- Bevan-Dye, A.L., Dhurup, M. & Surujlal, J. 2009. Black Generation Y students' perceptions of national sports celebrity endorsers as role models. *African Journal for Physical, Health Education, Recreation and Dance (AJPHERD)*, September:172-188.
- Bevan-Dye, A.L. & Akapojivi, U. 2016. South African Generation Y students' self-disclosure on Facebook. *South African Journal of Psychology*, 46(1):114-129.
- Bhatt, S.J. & Pandya, K. 2015. A study on impulse buying behaviour of customer in shopping malls with reference to Big Bazar and D-Mart. *International Journal of Retailing and Rural Business perspectives*, 4(3):1781-1787.
- Bhorat, H. 2015. Is South Africa the most unequal society in the world? <https://mg.co.za/article/2015-09-30-is-south-africa-the-most-unequal-society-in-the-world> Date of access: 22 August 2018.
- Biggar, S. & Butterworth, D. 2002. Student loans in New Zealand. In Fletcher, M. (Ed.), *Loans for lifelong learning*. London: Learning and Skills Development Agency.
- Blythe, J. 2013. *Consumer behaviour*. 2nd ed. Los Angeles, Calif.: Sage.
- Booij, A.S., Leuven, E. & Oosterbeek, H. 2012. The role of information in the take-up of student loans. *Economics of Education Review*, 31(1):33-44.
- Boon, T.H., Yee, H.S. & Ting, H.W. 2011. Financial literacy and personal financial planning in Klang Valley, Malaysia. *International Journal of Economics and Management*, 5(1):149-168.
- Borden, L.M., Lee, S., Serido, J. & Dawn, C. 2008. Changing college students' financial knowledge, attitudes and behaviour through seminar participation. *Journal of Family Economics*, 29(1):23-40.
- Bradley, N. 2010. *Marketing research: tools and techniques*. 2nd ed. New York: Oxford University Press.
- Braunsberger, K., Lucas, L. & Roach, D. 2004. The effectiveness of credit-card regulation for vulnerable consumers. *Journal of Services Marketing*, 18(5):258-370.

- Braunsberger, K., Lucas, L.A. & Roach, D. 2005. Evaluating the efficacy of credit card regulation. *International Journal of Bank Marketing*, 23:237–254.
- Bricker, J. & Thompson, J. 2016. Does education loan debt influence household financial distress? *Contemporary Economic Policy*, 34(4):660–677.
- Britt, S.L. 2016. The intergenerational transference of money attitudes and behaviours. *The Journal of Consumer Affairs*, Fall 2016:539–556.
- Brittain, C.D. 2014. Medieval banking and money. <http://cdalebrittain.blogspot.com/2014/11/medieval-banking-and-money.html> Date of access: 11 September 2018.
- Broadbridge, A.M., Maxwell, G.A. & Ogden, S.M. 2007. Experiences, perceptions and expectations of retail employment for Generation Y. *Career Development International*, 12(6):523-544.
- Burgess, S.M. 2007. Toward a theory on the content and structure of money attitudes. *Advances in Consumer Research*, 32:682-683.
- Burroughs, J.E. & Rindfleisch, A. 2002. Materialism and well-being: A Conflicting values perspective. *Journal of Consumer Research*, 29:348–70.
- Butcher, L., Phau, I. & Shimul, A.S. 2017. Uniqueness and status consumption in Generation Y consumers: Does moderation exist? *Marketing Intelligence & Planning*, 35(5):673-687.
- Byrne, B.M. 2012. Structural equation modelling with M-plus: basic concepts, applications, and programming. New York: Routledge.
- Caldwell, M. 2014. Secured Loans. http://moneyfor20s.about.com/od/shoppingforloans/g/secured_loan.htm Date of Access: 3 June 2014.
- Cant, M., Gerber-Nel, C., Nel, D. & Kotze, T. 2008. Marketing research. Claremont: New Africa books.
- Carver, L. & Candela, L. 2008. Attaining organizational commitment across different generations of nurses. *Journal of Nursing Management*, 16(8):984-991.

Cassim, A. & Oosthuizen, M. 2014. The state of youth unemployment in South Africa. <https://www.brookings.edu/blog/africa-in-focus/2014/08/15/the-state-of-youth-unemployment-in-south-africa/> Date of access: 19 April 2018.

Cecchetti, S.G., Mohanty, M.S. & Zampolli, F. 2011. The real effects of debt. Working Papers No 352, Bank for International Settlements.

Cele, S. 2016. #FeesMustFall: Students told to 'stand down, stop protests'. <http://citypress.news24.com/News/feesmustfall-students-told-to-stand-down-stop-protests-20160117> Date of access: 24 April 2016.

Centre for Higher Education Trust. 2017. South African Higher Education open data. <https://chet.org.za/data/sahe-open-data> Date of access: 6 July 2017.

Chae, J. 2017. Virtual makeover: Selfie-taking and social media use increase selfie-editing frequency through social comparison. *Computers in Human Behavior*, 66:370–376.

Chan, K. & Prendergast, G. 2007. Materialism and social comparison among adolescents. *Social Behaviour and Personality*, 35(2):213–228.

Chan, S.F., Chau, A.W. & Chan, K.Y. 2012. Financial knowledge and aptitudes: Impacts on college students' well-being. *College Student Journal*, 46:114–132.

Charles, K.K., Hurst, E. & Roussanov, N. 2009. Conspicuous consumption and race. *The Quarterly of Economics*, Vol. CXXIV Issue 2:425 – 467.

Chen, H.L. 2009. Consumer risk perception and addictive consumption behaviour. *Social Behaviour and Personality*, 37(6):767-780.

Chen, Y. & Wang, R. 2015. Are humans rational? Exploring factors influencing impulse buying intention and continuous impulse buying intention. *Journal of Consumer Behaviour*, 15:186–197.

Chien, Y. & Devaney, S.A. 2001. The effects of credit attitude and socioeconomic factors on credit card and instalment debt. *Journal of Consumer Affairs*, 35(1):163- 175.

- Chipp, K., Kleyn, N., & Manzi, T. 2011. Catch Up and Keep Up: Relative Deprivation and Conspicuous Consumption in an Emerging Market. *Journal of International Consumer Marketing*, 23(2):117-134.
- Cho, J., Ching, G.S. & Luong, T. 2014. Impulse buying behaviour of Vietnamese consumers in supermarket setting. *International Journal of Research Studies in Management*, 3(2):33-50.
- Chuah, H.W., Marimuthu, M. & Ramayah, T. 2014. The effect of perceived value on the loyalty of Generation Y mobile internet subscribers: A proposed conceptual framework. *Procedia-Social and Behavioural Sciences*, 130(1):532-541.
- Chudry, F., Foxall, G. & Pallister, J. 2011. Exploring attitudes and predicting intentions: Profiling student debtors using an extended theory of planned behaviour. *Journal of Applied Social Psychology*, 41(1):119–149.
- Churchill Jr, G.A., Brown, T.J. & Suter, T.A. 2010. Basic marketing research. 7th ed. Australia: South-Western Cengage Learning.
- Clark, L.A. & Watson, D. 1995. Constructing validity: basic issues in objective scale development. *Psychological Assessment*, 7(3):309-319.
- Codrington, G. & Grant-Marshall, S. 2011. Mind the gap (2nd ed.). London, United Kingdom: Penguin.
- Coggan, P. 2012. How the Industrial Revolution created modern debt. <http://blogs.reuters.com/great-debate/2012/02/07/how-the-industrial-revolution-created-modern-debt/> Date of access: 11 September 2018.
- Combes, J.L., Hamit-Haggar, M. & Schwartz, S. 2018. A multilevel analysis of the determinants of willingness to pay to prevent environmental pollution across countries. *Social Science Journal*, 55:284–299.
- Costantini, M., Meco, I. & Paradiso, A. 2018. Do inequality, unemployment and deterrence affect crime over the long run? *Regional Studies*, 52:558–571.

Costelle, A.B. & Osborne, J.W. 2005. Best practices in exploratory factor analysis: Four recommendations for getting the most from your analysis. *Practical Assessment, Research & Evaluation*, 10:1-9.

Council on Higher Education. 2016. 2013 Higher education data: Participation. http://www.che.ac.za/focus_areas/higher_education_data/2013/participation#gender
Date of access: 4 July 2017.

Crane, L. 2007. On campus and beyond: College students today. *Trends & Tudes*, 6(6):1-4.

Cronje, A., Jacobs, B., Retief, A. 2016. Black urban consumers' status consumption of clothing brands in the emerging South African market. *International Journal of Consumer Studies* 40:754–764.

Csikszentmihalyi, M. & Rochberg-Halton, E. 1978. Reflections on materialism. *University of Chicago Magazine*, 70 (3):6-15.

Cude, B.J., Lawrence, F.C., Lyons, A.C., Metzger, K., LeJeune, E., Marks, L. & Machtmes, K. 2006. College students and financial literacy: what they know and what we need to learn. *Eastern Family Economics and Resource Management Association*, 2006 Conference:102-109.

Dahlberg, T., Mallat, N., Ondrus, J. & Zmijewska, A. 2008. Past, present and future of mobile payments research: a literature review. *Electronic Commerce Research and Applications*, 7:165-181.

Daly, H.E. & Farley, J. 2011. *Ecological economics: Principles and applications*. (2nd ed.), Island Press, Washington, D.C.

Dano, Z. 2018. Credit card fraud up to R436 million in 2017. <https://www.iol.co.za/capeargus/news/credit-card-fraud-up-to-r436-million-in-2017-14603912> Date of access: 13 July 2018.

Davies, E. & Lea, S E.G. 1995. Student attitudes to student debt. *Journal of Economic Psychology*, 16:663-679.

- Davila, J.F., Casabayó, M. & Singh, J.J. 2017. A world beyond family: How external factors impact the level of materialism in children. *Journal of Consumer Affairs*, 51:162–182.
- Dawson, S. & Kim, M. 2009. External and internal trigger cues of impulse buying online. *Direct Marketing: An International Journal*, 3(1):20-34.
- Deckop, J.R., Jurkiewicz, C.L. & Giacalone, R.A. 2010. Effects of materialism on work-related personal well-being. *Human Relations*, 63:1007–1030.
- Del Negro, M. & Tao, M. 2013. Historical echoes: cash or credit? Payments and finance in ancient Rome. <http://libertystreeteconomics.newyorkfed.org/2013/02/historical-echoes-cash-or-credit-payments-and-finance-in-ancient-rome.html> Date of access: 13 August 2018.
- Deloitte. 2014. Millennial capital. <http://www.moneyweb.co.za/moneyweb-soapbox/millennial-capital> Date of access: 15 July 2014.
- Deri, S., Davidai, S. & Gilovich, T. 2017. Home alone: Why people believe others' social lives are richer than their own. *Journal of Personality and Social Psychology*, 113:858–877.
- Dholakia, U.M. 2000. Temptations and resistance: an integrated model of consumption impulse formation and enactment. *Psychology & Marketing*, 17(11):955-982.
- Dirk, N. 2014. SA's debt: Rough 2015 ahead? <http://www.iol.co.za/business-report/economy/sas-debt-rough-2015-ahead-1799591> Date of access: 20 April 2017.
- Donnelly, G., Ksendzova, M. & Howell, R.T. 2013. Sadness, identity, and plastic in over-shopping: The interplay of materialism, poor credit management, and emotional buying motives in predicting compulsive buying. *Journal of Economic Psychology*, 39:113-125.
- Donou-Adonsou, F. & Sylwester, K. 2016. Financial development and poverty reduction in developing countries: New evidence from banks and microfinance institutions. *Review of Development Finance*, 6:82–90.

Du Preez, L. 2014. <http://www.iol.co.za/business/personal-finance/unfair-practices-rife-in-credit-industry-1.1714606#.U7-2WkC5exK> Date of Access: 11 July 2014.

Duffett, R.G. 2015. The influence of Mxit advertising on purchase intentions and purchase amid Generation Y. *Journal of Contemporary Management*, 12:336–359.

Duh, H.I. 2014. Application of the human capital life-course theory to understand Generation Y South Africans' money attitudes. *Journal of Economics and Behavioural Studies*, 6(12):974-985.

Duh, H.I. 2016. Childhood family experiences and young Generation Y money attitudes and materialism. *Personality and Individual Differences*, 95:134–139.

Duh, H.I., Benmoyal-Bouzaglo, S., Moschis, G.P. & Smaoui, L. 2014. Examination of young adults' materialism in France and South Africa using two life-course theoretical perspectives. *Journal of Family and Economic Issues*, 36(2):251–262.

Duh, H.I., & Struwig, M. 2015. Justification of generational cohort segmentation in South Africa. *International Journal of Emerging Markets*, 10(1):89-101.

Dunn, L.F. & Mirzaie, I.A. 2015. Consumer debt stress, changes in household debt, and the Great Recession. *Economic Inquiry*, 54(1):201–214.

Dupor, B. & Liu, W.F. 2003. Jealousy and equilibrium overconsumption. *American Economic Review*, 93(1):423-428.

Durkin, T.A., Elliehausen, G., Staten, M.E. & Zywicki, T.J. 2014. Consumer credit and the American economy. <http://www.oxfordscholarship.com/view/10.1093/acprof:oso/9780195169928.001.0001/acprof-9780195169928-chapter-1> Date of access: 23 September 2018.

Du Toit, E. & Cuba, Y.Z. 2018. Cost and profit efficiency of listed South African banks pre and post the financial crisis. *Research in International Business and Finance*, 45:435–445.

Dwyer, R.E. McCloud, L. & Hodson, R. 2012. Debt and graduation from American Universities. *Social Forces*, 90(4):1133-55.

Eastman, J.K., Goldsmith, R.E. & Flynn, L.R. 1999. Status consumption in consumer behaviour: scale development and validation. *Journal of Marketing Theory and Practice*, 7:41-52.

Eastman J.K. & Iyer, R. 2012. The relationship between cognitive age and status consumption. *Marketing Management Journal*, Spring:80–96.

Eastman, J.K. & Liu, J. 2012. The impact of generational cohort on status consumption: an exploratory look at generational cohort and demographics on status consumption. *Journal of Consumer Marketing*, 29(2):93–102.

Edwards, J. 2017. An economic trend that ensured British prosperity for the last 136 years just went into reverse. <http://uk.businessinsider.com/millennials-uk-first-generation-1800s-do-worse-than-parents-resolution-foundation-2017-2> Date of access: 18 October 2017.

Eisner, S.P. 2005. Managing Generation Y. *S.A.M. Advanced Management Journal*, 70(4):4-15.

Elliott, W. & Lewis, M. 2013. Student loans are widening the wealth gap in America: time to focus on equity. *Assets and Education Initiative (AEDI)*, 2013:1-78.

Enamorado, T., López-Calva, L.F., Rodríguez-Castelán, C. & Winkler, H. 2016. Income inequality and violent crime: Evidence from Mexico's drug war. *Journal of Development Economics*, 120:128–143.

Engelberg, E. & Sjoberg, L. 2006. Money attitudes and emotional intelligence. *Journal of Applied Social Psychology*, 36:2027–2047.

Ensor, L. 2013. 'Amnesty' to 1.6-million blacklisted consumers. <http://www.bdlive.co.za/business/financial/2013/09/06/amnesty-to-1.6-million-blacklisted-consumers>. Date of access: 10 June 14.

Erasmus, S. 2015. South Africans world's top borrowers. <https://www.fin24.com/Debt/News/South-Africans-worlds-top-borrowers-20150602> Date of access: 19 July 2018.

Fatoki, O. 2015. Gender, academic major and the love of money by university students in South Africa. *Gender & Behaviour*, 13(1):6632 – 6639.

Ferreira, K. 2017. Analysis: How indebted consumers are stretching SA to its limits. <https://www.businesslive.co.za/bd/economy/2017-09-12-indebted-consumers-on-a-credit-knife-edge/> Date of access: 28 June 2018.

Festinger, L. 1954. A theory of social comparison processes. *Human Relations*, 7:117–140.

Field, A. 2009. *Discovering statistics using SPSS*. 3rd ed. Thousand Oaks, CA: Sage.

Finaccord. 2016. Press release global consumer lending: size, segmentation and forecast for the worldwide market. http://www.finaccord.com/press-release_2016-global-consumer-lending-size-segmentation-forecast-for-worldwide-market.htm Date of access 12 September 2018.

Finn, D.R. 1992. The meaning of money – a view from economists. *American Behavioural Scientist*, 35(6):658 - 668.

Finney, A., Collard, S. & Kempson, E. 2007. Easy come, easy go: Borrowing over the life-cycle. Personal Finance Research Report, Standard Life.

Fishbein, M. & Ajzen, I. 1975. *Belief; attitude, intention, and behaviour: An introduction to theory and research*. Reading, MA: Addison-Wesley Publishing Co.

Fisher-French, M. 2017. Choose a student loan over personal loan. <https://www.fin24.com/Money/choose-a-student-loan-over-personal-loan-20170423-2> Date of access: 15 November 2018.

Fitzmaurice, J. & Comegys, C. 2006. Materialism and social consumption. *The Journal of Marketing Theory and Practice*, 14(4):287-299.

Fletcher, M. 2002. Would loans help lifelong learning? In Fletcher, M. (Ed.), *Loans for lifelong learning*. London: Learning and Skills Development Agency.

Forman, N. 1987. *Mind over money*. Toronto, Canada: Doubleday.

Fourie, J. 2018. The cost of crime. <https://www.fin24.com/Finweek/Opinion/the-cost-of-crime-20180815> Date of access: 22 August 2018.

Fox, J. & Vendemia, M.A. 2016. Selective self-presentation and social comparison through photographs on social networking sites. *Cyberpsychology, Behaviour, and Social Networking* 19:593–600.

Frandsen, B.M. 2009. Leading by recognizing generational differences. *Long-Term Living: For the Continuing Care Professional*, 58(2):34-35.

Friedrich, C. 2016. Why do 70% to 80 % of small businesses fail within five years? ...and what should be done to strengthen SMMEs in South Africa? <https://www.moneyweb.co.za/mybusiness/why-do-70-to-80-of-small-businesses-fail-within-five-years/> Date of access: 27 June 2018.

Funfgeld, B. & Wang, M. 2009. Attitudes and behaviour in everyday finance: Evidence from Switzerland. *International Journal of Bank Marketing*, 27(2):108-128.

Furnham, A. 1984. Many sides of the coin: The psychology of money usage. *Personality and Individual Differences*, 5(5):501-509.

Furnham, A. 2006. Individual differences, affective and social factors. *Behavioural and Brain Sciences*, 29(2):185-186.

Garman, E.T., Kim, J. & Durband D.B. 1999. Credit delinquencies: A portrait of pain for employers' bottom lines – preliminary findings. *Personal Finance and Worker Productivity*, 3(1):165-168.

Gaskin, L. & Lim, J. 2016. Master validity tool. AMOS Plugin. <https://statswiki.kolobkreations.com>

George, E.E., Hansen, M.E. & Routzahn, J.L. 2018. Debt tolerance, gender, and the great recession. *Journal of Consumer Affairs*, 2018:1-22.

Gervase-lwu, C., Ezeuduji, I. O., Eresia-Eke, C. & Tengeh, R. 2016. The entrepreneurial intention of university students: The case of a university of technology in South Africa. *Acta Universitatis Danubius* 12:164–181.

Gill, A. & Bhattacharya, R. 2017. The Interaction of Financial Attitudes and Financial Knowledge: Evidence for Low-Income Hispanic Families. *Atlantic Economic Journal* 45:497–510.

Gill, D., Palmer, C., Mulder, R. & Wilkinson, T. 2001. Medical student debt at the Christchurch School of Medicine. The New Zealand wellbeing, intentions, debt and experiences (WIDE) survey of medical students' pilot study. Results part I. *The New Zealand Medical Journal*, 114(1142):461–464.

Gobat, J. 2012. What is a bank? Finance and development. <http://www.imf.org/external/pubs/ft/fandd/2012/03/basics.htm> Date of access: 15 May 2016.

Goko, C. 2013. Youth spending report finds student debt is exploding. <http://www.bdlive.co.za/economy/2013/07/05/youth-spending-report-finds-student-debt-is-exploding> Date of access: 19 January 2014.

Goldsmith, R.E. & Goldsmith, E.B. 2006. The effect of investment education on gender differences in financial knowledge. *Journal of Personal Finance*, 5(2):55-69.

Goldsmith, R.E. & Clark R.A. 2012. Materialism, status consumption, and consumer independence. *The Journal of Social Psychology*, 152(1):43–60.

Goldsmith, R.E., Flynn, L.R. & Kim, D. 2010. Status consumption and price sensitivity. *Journal of Marketing Theory and Practice*, 18(4):323-338.

Goldstein, N.J., Cialdini, R.B. & Griskevicius, V. 2008. A Room with a viewpoint: Using social norms to motivate environmental conservation in hotels. *Journal of Consumer Research*, 35:472–482.

Gossel, S.J. & Biepke, N. 2012. The effects of capital inflows on South Africa's economy. *Applied Financial Economics*, 22:923 – 938.

Govender, P. 2016. School dropout numbers blamed on poor learning in early grades. <https://mg.co.za/article/2016-06-06-school-dropout-numbers-blamed-on-poor-learning-in-early-grades> Date of access: 18 October 2017.

Gregorio, J.D. & Lee, J.W. 2002. Education and income Inequality: new evidence from cross-country data. *Review of Income and Wealth*, 48:395–416.

Grotts, A.S. & Widner-Johnson, T. 2013. Millennial consumers' status consumption of handbags. *Journal of Fashion Marketing and Management: An International Journal*, 17:280–293.

Groenewald, Y. 2018. Economy takes its toll as car debt defaulters rise – index. <https://www.fin24.com/Economy/economy-takes-its-toll-as-car-debt-defaulters-rise-index-20180212> Date of access: 19 July.

Gumede, M. 2016. Billions owed to student financial aid scheme NSFAS. <https://www.businesslive.co.za/bd/national/education/2016-12-24-billions-owed-to-student-financial-aid-scheme-nsfas/> Date of access: 18 July 2018.

Gunzler, D., Chen, T., Wu, P. & Zhang, H. 2013. Introduction to mediation analysis with structural equation modelling. *Shanghai archives of psychiatry*, 25:390–394.

Gurney, K. 1988. *Your money personality: What it is and how you can profit from it*. Sarasota, FL: Financial Psychology Corporation.

Hair, J.F., Black, W.C., Babin, B.J. & Anderson, R.E. 2010. *Multivariate data analysis: a global perspective*. 7th ed. Upper Saddle River, N.J.: Pearson.

Hair, J.F., Wolfinbarger, M., Ortinau, D.J. & Bush, R.P. 2013. 3rd ed. *Essentials of marketing research*. New York: McGraw-Hill.

Harnish, R.J., Bridges, K.R., Nataraajan, R., Gump, J.T. & Carson, A.E. 2018. The impact of money attitudes and global life satisfaction on the maladaptive pursuit of consumption. *Psychology and Marketing*, 35:189–196.

Harris, S. 2013. High competition in SA banking industry. *Financial Mail*, 17 October. <http://www.financialmail.co.za/moneyinvesting/2013/10/17/high-competition-in-sa-banking-sector>. Date of access: 15 May 2016.

Hartley, A. 2015. Judge strikes a blow for indebted. <http://www.iol.co.za/news/crime-courts/judge-strikes-a-blow-for-indebted-1882638> Date of access: 29 May 2016.

Hawkins, D.I., Mothersbaugh, D.L. & Best, R.J. 2007. *Consumer behaviour: building marketing strategies*. 10th ed. Pennsylvania: McGraw-Hill/Irwin.

Hawkins, D. & Mothersbaugh, D. 2010. *Consumer behaviour: building marketing strategy*. 11th ed. New York: McGraw-Hill.

Hawkins, D.I. & Mothersbaugh, D.L. 2013. *Consumer behaviour: building marketing strategy*. 12th ed. New York: McGraw-Hill.

Hayhoe, C.R., Leach L. & Turner P.R. 1999. Discriminating the number of credit cards held by college students using credit and money attitudes. *Journal of Economic Psychology*, 20:643–656.

Hayhoe, C.R., Leach, L., Allen, M.W. & Edwards, R. 2005. Credit cards held by college students. *Financial Counselling and Planning*, 16:1–10.

Heller, D.E. 2008. *The impact of student loans on college access. The effectiveness of student aid policies: What the research tells us*. New York: College Board.

Herrington, M., Kew, P. & Mwanga, A. 2017. South Africa report 2016/2017. Can small businesses survive in South Africa? <https://www.gemconsortium.org/report/49833> Date of access: 27 June 2018.

Hicks, D.L. & Hicksy, J.H. 2014. Jealous of the Joneses: Conspicuous consumption, inequality, and crime. *Oxford Economic Papers*, 66:1090–1120.

Hilgert, M.A., Hogarth, J.M., & Beverly, S.G. 2003. Household financial management: The connection between knowledge and behaviour. *Federal Reserve Bulletin*, July 2003:309-321.

Hlatshaneni, S. 2018. Why ‘mashonisas’ remain such popular informal lenders. <https://citizen.co.za/business/1935867/why-mashonisas-remain-such-popular-informal-lenders/> Date of access: 13 August 2018.

Hogarth, J. 2002. Financial literacy and family and consumer sciences. *Journal of Family and Consumer Sciences*, 94(1):14-28.

Hox, J.J. & Bechger, T.M. 1998. An introduction to structural equation modelling. *Family Science Review*, 11:354-373.

Human Sciences Research Council. 2003. Household indebtedness in South Africa in 1995 and 2000. Pretoria, South Africa: Micro Finance Regulatory Council.

Hurwitz, I. & Luiz, J. 2007. Urban working class credit usage and over-indebtedness in South Africa. *Journal of Southern African Studies*, 33(1):107–131.

Hutchinson, D., Brown, J. & Longworth, K. 2012. Attracting and maintaining the Y generation in nursing: a literature review. *Journal of Nursing Management*, 20 (4):444-450.

Iacobucci, D. & Churchill, A.G. 2010. Marketing research: methodological foundations. 10th ed. Mason, OH: South-Western Cengage Learning.

Irby, L. 2014. 10 Side effects of bad credit. <http://credit.about.com/od/creditrepair/tp/bad-credit-side-effects.htm> Date of access: 13 March 2014.

Irby, L. 2016. How secured loans are different from unsecured loans. <https://www.thebalance.com/how-secured-loans-are-different-from-unsecured-loans-960032> Date of access: 28 June 2018.

Ironfield-Smith, C., Keasy, K., Summers, B., Duxbury, D. & Hudson, R. 2005. Consumer debt in the UK: Attitudes and implications. *Journal of Financial Regulation and Compliance*, 13(2):132–141.

Ismail, A. 2017. SIM-swap victims mull legal action against banks. <https://www.fin24.com/Companies/Financial-Services/sim-swap-victims-mull-legal-action-against-banks-20170424> Date of access: 24 July 2018.

Ivry, B. 2008. Paulson seeks mortgage value that eluded Bear, Lehman. http://www.bloomberg.com/apps/news?pid=newsarchive&refer=home&sid=aGT_xTYzb_bQE Date of access: 30 July 2014.

- Jacobs, G. & Smith, E.V.D.M. 2010. Materialism and indebtedness of low income consumers: Evidence from South Africa's largest credit granting catalogue retailer. *South African Journal of Business Management*, 41(4):11–33.
- Jappelli, T. 2009. Economic literacy: An international comparison. *The Economic Journal*, 120: F429–F451.
- Javine, V. 2013. Financial knowledge and student loan usage in college students. *Financial Services Review*, 22:367–387.
- Jeynes, K. 2016. Factsheet: How many South African students graduate? <https://africacheck.org/factsheets/factsheet-many-south-african-students-graduate/> Date of access: 18 October 2017.
- Johnston, A. & Barr, N. 2013. Student loan reform, interest subsidies and costly technicalities: Lessons from the UK experience. *Journal of Higher Education Policy and Management*, 35(2):167–178.
- Joji, A.N. & Reveendran, P.T. 2007. Compulsive buying behaviour in Indian consumers and its impact on credit default – An emerging paradigm. *Consumer Markets and Marketing*, 4:455-562.
- Jordaan, Y., Ehlers, L. & Grové, J.M. 2011. Advertising credibility across media channels: Perceptions of Generation Y consumers. *Communicare* 30:1–20.
- Joubert, P. 2013. Introduction to consumer behaviour. 2nd ed. Cape Town: Juta.
- Kaminsky, G.L. & Reinhart, C.M. 1999. The twin crises: The causes of banking and balance-of-payments problems. *American Economic Review*, 89:473–500.
- Kanchan, A., Banerjee, B., Wilson, D. & Sullivan, W. 2012. Trends in retail banking channels: improving client service and operating costs. https://www.capgemini.com/resource-file-access/resource/pdf/Trends_in_Retail_Banking_Channels_Improving_Client_Service_and_Operating_Costs.pdf Date of access: 26 June 2018.

Kasser, T. & Ryan, R.M. 1993. A dark side of the American dream: Correlates of financial success as a central life aspiration. *Journal of Personality and Social Psychology*, 65(2):410–422.

Kearney, L. 2016. Do top-end credit cards really give you more? <https://www.iol.co.za/personal-finance/my-money/banking/do-top-end-credit-cards-really-give-you-more-2055289> Date of access: 16 July 2018.

Keller, C. & Stocker, M. 2014. Executive compensation's role in the financial crisis. <http://www.corpcounsel.com/id=1202426091714> Date of Access: 30 July 2014.

Kelly-Louw, M. 2008. The prevention and alleviation of consumer over-indebtedness. *South African Mercantile Law Journal*, 20:200–226.

Kennedy, B.P. 2013. The theory of planned behaviour and financial literacy: A predictive model for credit card debt? Marshall University. Theses, dissertations and capstones. Paper 480.

Kent, R. 2007. *Marketing research: approaches, methods and applications in Europe*. London: Thomson Learning.

Kettle, K.L., Trudel, R., Blanchard, S.J. & Haubl, G. 2016. Repayment concentration and consumer motivation to get out of debt. *Journal of Consumer Research*, 43:460 – 477.

Kharas, H. 2010. The emerging middle class in developing countries. OECD Development Centre. Working Paper No. 285.

Khare, A. 2014. Money attitudes, materialism, and compulsiveness: Scale development and validation. *Journal of Global Marketing*, 27:30 – 45.

Khine, M.S. 2013. *Application of structural equation modelling in educational research and practice*. AW Rotterdam. The Netherlands: Sense Publishers.

Kidwell, B., Brinberg, D. & Turrisi, R. 2003. Determinants of money management behaviour. *Journal of Applied Social Psychology*, 33:1244–1260.

- Kim, D. & Jang, S. 2013. Motivational drivers for status consumption: a study of Generation Y consumers. *International Journal of Hospitality Management*, 38:39-47.
- Kim, D. & Jang, S. 2017. Symbolic consumption in upscale cafés: Examining Korean Gen Y consumers' materialism, conformity, conspicuous tendencies, and functional qualities. *Journal of Hospitality and Tourism Research*, 41:154–179.
- Kim, H. 2013. Situational materialism: How entering lotteries may undermine self-control. *Journal of Consumer Research*, 40:759–772.
- Kim, H., Callan, M.J., Gheorghiu, A.I. & Matthews, W.J. 2017. Social comparison, personal relative deprivation, and materialism. *British Journal of Social Psychology*, 56:373–392.
- Kim, S. 2014. Does a money-is-all attitude cause alienation? A cross-cultural comparison of Korea, the US and Sweden. *International Journal of Consumer Studies*, 38:650–659.
- Kim, H., Callan, M.J., Gheorghiu, A.I. & Matthews, W.J. 2017. Social comparison, personal relative deprivation, and materialism. *British Journal of Social Psychology*, 56:373–392.
- King, R.G. & Levine, R. 1993. Finance, entrepreneurship, theory and evidence. *Journal of Monetary Economics*, 32:513–542.
- Kirkcaldy, B. & Furnham, A. 1993. Predictors of beliefs about money. *Psychological Reports*, 73:1079 - 1082.
- Kline, R.B. 2013. Beyond significance testing: statistics reform in the behavioural sciences. 2nd ed. Washington, DC: American Psychological Association.
- Kostov, P., Arun, T. & Annim, S. 2015. Access to financial services: The case of the “Mzansi” account in South Africa. *Review of Development Finance*, 5:34–42.
- Kotler, P. & Keller, K.L. 2012. Marketing management. 14th ed. London: Prentice-Hall.

- Kreng, V.B. & Huang, M. 2011. Corporate social responsibility: Consumer behaviour, corporate strategy and public policy. *Social behaviour and personality*, 39(4):529-542.
- Krueger, D.W. 1986. Money, success and success phobia. The last taboo: Money as symbol and reality in psychotherapy and psychoanalysis. New York: Brunner/Mazel.
- Kumar, S. 2016. Is the US consumer credit asymmetric? *Scottish Journal of Political Economy*, 63(2):194-215.
- Lamprecht, I. 2014. Beware the pop of balloon payments. <http://www.moneyweb.co.za/moneyweb-investment-insights/beware-the-pop-of-balloon-payments> Date of access: 1 August 2014.
- Lamprecht, I. 2018. Why economic growth continues to disappoint. <https://www.moneyweb.co.za/news/economy/why-economic-growth-continues-to-disappoint/> Date of access: 28 August 2018.
- Lau, S. 1998. Money: What it means to Children and Adults. *Social Behaviour and Personality*, 26:297–306.
- Laroche, M., Pons, F., Zgolli, N., Cervellon, M.C. & Kim, C. 2003. A model of consumer response to two retail sales promotion techniques. *Journal of Business Research*, 56(7):513- 522.
- Lay, A. & Furnham, A. 2018. A new money attitudes questionnaire. *European Journal of Psychological Assessment*, 2018:1–10.
- Lea, S.E.G., Webley, P. & Walker, C.M. 1995. Psychological factors in consumer debt: Money management, economic socialization, and credit use. *Journal of Economic Psychology*, 16(4):681-701.
- Lea, S.E.G. & Webley, P. 2006. Money as tool, money as drug: The biological psychology of a strong incentive. *Behavioural and Brain Sciences*, 29 (2):161-209.
- Leclerc, K. 2012. Influential factors contributing to college student spending habits and credit card debt. *University of New Hampshire's Undergraduate Sociology Journal*, Spring:149–156.

- Lee, J. & Kwon, K. 2002. Consumers' use of credit cards: Store credit card usage as an alternative payment and financing medium. *Journal of Consumer Affairs*, 26(2):239 – 262.
- Lei, P.W. & Wu, Q. 2007. Introduction to structural equation modelling: issues and practical considerations. *Instructional educational measurement*, 26(3):33-43.
- Liang, R. 2018a. Price cuts help Vodacom attract more subscribers. <https://www.businesslive.co.za/bd/companies/telecoms-and-technology/2018-07-24-price-cuts-help-vodacom-attract-more-subscribers/> Date of access: 24 July 2018.
- Liang, R. 2018b. MTN's mixed bag of subscriber numbers shows a market under pressure. <https://www.businesslive.co.za/bd/companies/telecoms-and-technology/2018-05-03-mtns-mixed-bag-of-subscriber-numbers-shows-a-market-under-pressure/> Date of access: 24 July 2018.
- Leguizamon, S. 2016. Who cares about relative status? A quintile approach to consumption of relative house size. *Applied Economics Letters*, 23:307–312.
- Liao, J. & Liu, X. 2012. Risk and consumer debt behaviours in China. *Social Behaviour and Personality*, 40(8):1263-1270.
- Lindsey, I. 1994. Credit card. Leighton Buzzard: Rushmere Wynne.
- Livingstone, S.M. & Lunt, P.K. 1992. Predicting personal debt and debt repayment: Psychological, social and economic determinants. *Journal of Economic Psychology*, 13:111-134.
- Livshits, I. 2015. Recent developments in consumer credit and default literature. *Journal of Economic Surveys*, 29(4):594–613.
- Logemann, J. 2008. Different paths to mass consumption: Consumer credit in the United States and West Germany during the 1950s and '60s. *Journal of Social History*, spring 2008:525 – 559.
- Logemann, J. 2011. Americanization through credit? Consumer credit in Germany, 1860s-1960s. *Business History Review*.

Lohman, J., Wilhelm, D., Kambala, C., Brenner, S., Muula, A.S. & De Allegri, M. 2018. The money can be a motivator, to me a little, but mostly PBF just helps me to do better in my job. An exploration of the motivational mechanisms of performance-based financing for health workers in Malawi. *Health Policy and Planning*, 33:183–191.

Lombard, L. 2018. Saving nurtures financial wellbeing. <https://www.sowetanlive.co.za/business/money/2018-08-02-saving--nurtures-financial-wellbeing/> Date of access: 13 August 2018.

Lown, J.M. 2011. Development and validation of a financial self-efficacy scale. *Journal of financial counselling and planning*, 22(2):54-63.

Lunt, P. & Livingstone, S. 1991. Psychological, social and economic determinants of saving: Comparing recurrent and total savings. *Journal of Economic Psychology*, 12:621-641.

Luna-Arocas, A.R. & Tang, T.L. 2004. The love of money, satisfaction, and the protestant work ethic: Profiles among university money professors. *Journal of Business*, 50:329–354.

Luo, X. 2004. Group dynamics of impulse buying: an extended social facilitation perspective. In Kahn, B.E. & Luce, M.F., eds. *Advances in consumer research*. Valdosta: Association for Consumer Research.

Mabuza, E. 2018. Teething problems for NSFAS. <https://www.heraldlive.co.za/news/2018-04-24-teething-problems-for-nsfas/> Date of access: 18 July 2018.

Madden, T.J., Ellen, P.S. & Ajzen, I. 1992. A comparison of the theory of planned behaviour and the theory of reasoned action. *Personality and Social Psychology Bulletin*, 18(1):3-9.

Maduku, D.K. 2013. Predicting retail banking customers' attitude towards internet banking services in South Africa. *Southern African Business Review*, 7:76-100.

Malhotra, N.K. 2018. *Marketing research: An applied orientation*. 7th ed. New Jersey: Pearson.

- Manktelow, R. 2011. Community, consumerism and credit: The experience of an urban community in North-West Ireland. *Community, Work and Family*, 14(3):257–274.
- Mansfield, P. & Warwick, J. 2000. Credit card consumers: College students' knowledge and attitude. *Journal of Consumer Marketing*, 17:617-626.
- Mapother, B. 1999. The real cause of bankruptcy. *Credit Union Magazine*, 65(6):78.
- Marais, H. 2009. The impact of the global recession on South Africa. http://www.realinstitutoelcano.org/wps/portal/rielcano_en/contenido?WCM_GLOBAL_CONTEXT=/elcano/elcano_in/zonas_in/ARI115-2009 Date of access: 9 July 2018
- Markert, J. 2004. Demographics of age: Generational and cohort confusion. *Journal of Current Issues and Research in Advertising*, 26(2):11-25.
- Marlow, S. & Patton, D. 2005. All credit to men? Entrepreneurship, finance, and gender. *Entrepreneurship Theory and Practice*, 1042:717 – 735.
- Martin, E. 2018. 39% of college students would consider dropping out to avoid going further into debt. <https://www.cnbc.com/2018/05/24/students-would-drop-out-of-college-to-avoid-more-debt.html> Date of access: 28 August 2018.
- Martin, M.C. & Kennedy, P.F. 1993. Advertising and the social comparison consequences for female preadolescents and adolescents. *Psychology and Marketing*, 10(6):513-530.
- Mawson, N. 2015. Credit amnesty 'backfires'. <https://www.iol.co.za/business-report/economy/credit-amnesty-backfires-1900960> Date of access: 30 July 2018.
- Maynard, J. 2017. Is SA's government spending money faster than they can collect taxes? <https://za.investing.com/analysis/is-sa's-government-spending-money-faster-than-they-can-collect-taxes-200195851> Date of access: 30 August 2018.
- McCready, V. 2011. Generational issues in supervision and administration. *ASHA leader*, 16(5):12-15.

McDaniel, C. & Gates, R. 2010. Marketing research essentials. 6th ed. Danvers, Mass: Wiley and Sons, Inc.

McDaniel, C., Lamb, C.W. & Hair, J.F. 2013. Introduction to marketing. 12th ed. Australia: South-Western Cengage Learning.

McDonald, D. 2015. Millennials skip banks, ask family for advice – survey. <http://www.fin24.com/Money/MoneyManagement/Milllenials-skip-banks-ask-family-for-advice-survey-20150520> Date of access: 20 April 2017.

McHugh, S. & Ranyard, R. 2012. Credit repayment decisions: The role of long-term consequence information, economic and psychological factors. *Review of Behavioural Finance*, 4:98–112.

McMahon, L. 2012. Student protesters end street blockade. <http://www.stuff.co.nz/business/budget-2012/6979244/Studentprotesters-end-street-blockade> Date of access: 4 April 2016.

Mdaka, Y. 2017. 37% of South Africans earn a second income – report. <http://www.destinyman.com/2017/07/10/37-south-africans-earn-second-income-report/> Date of access: 19 July 2018.

Medina, J.F., Saegert, J. & Gresham, A. 1996. Comparison of Mexican-American and Anglo-American attitudes toward money. *The Journal of Consumer Affairs*, 30(1):124 - 145.

Merten, M. 2016. General household survey 2015: The education and income numbers don't add up to great results. <https://www.dailymaverick.co.za/article/2016-06-03-general-household-survey-2015-the-education-and-income-numbers-dont-add-up-to-great-results/#.Wa---MgjHIV> Date of access: 6 September 2017.

Mkhwanazi, S. 2018. Bill to root out fake degrees in candidates. <https://www.iol.co.za/the-star/bill-to-root-out-fake-degrees-in-candidates-16365419> Date of access: 30 August 2018.

Moav, O. & Neeman, Z. 2012. Saving rates and poverty: The role of conspicuous consumption and human capital. *Economic Journal*, 122:933–956.

Mobius, M. 2017. South Africa: Key Issues and Challenges. <http://emergingmarkets.blog.franklintempleton.com/2017/03/16/south-africa-key-issues-and-challenges/> Date of access: 12 June 2018.

Mofokeng, T., Bevan-Dye, A. & de Klerk, N. 2015. Team identification and soccer involvement as determinants of African Generation Y students' Premier Soccer League team psychological commitment. *African Journal for Physical, Health Education, Recreation and Dance (AJPHERD)*, 21(1):128-146.

Mogale, M. T. 2007. Local governance and poverty reduction in South Africa II: the role of micro-finance. *Progress in Development Studies*, 7(4):345 – 355.

Momentum. 2017. South African household wealth index. <https://www.momentum.co.za/wps/wcm/connect/momV1/8207db07-63c4-436e-9478-25704854b65e/Momentum+Unisa+Household+Net+Wealth+Report+full+year+2017+FINAL.pdf?MOD=AJPERES> Date of access: 24 April 2018.

Momentum. 2018. Momentum personal loans. <https://www.momentum.co.za/for/you/products/personal-loans> Date of access: 16 July 2018.

Monteiro, D.L.C., Penaloza, V., Pinto, F.R., Coria, M.C.D. & Calderon, L.M.O. 2015. Attitudes towards money and motivational orientation to work in Brazilian young workers. *Contaduría y Administración*, 60(1):11-30.

Moodley, N. 2017. Improve your financial literacy in 2017. <https://m.fin24.com/Money/Lifestyle/improve-your-financial-literacy-in-2017-20170115-2> Date of access: 10 February 2019.

Moore, J., Gale, J., Dew, K. & Davie, G. 2006. Student debt amongst junior doctors in New Zealand; part 1: quantity, distribution, and psychosocial impact. *The New Zealand Medical Journal*, 119:12-29.

Moschis, G.P. 2017. Research frontiers on the dark side of consumer behaviour: The case of materialism and compulsive buying. *Journal of Marketing Management*, 33(15):1384-1401.

Mostert, P.G. & Du Plessis, P.J. 2007. Introduction to marketing management: A South African perspective. Faerie Glen: Mustard House.

Mott, E. 2018. Psychological factors that influence consumer buying behaviour. <http://smallbusiness.chron.com/psychological-factors-influence-consumer-buying-behavior-80618.html>. Date of access: 09 October 2018.

Muchmore, M. 2018. The best mobile payment apps of 2018. <https://www.pcmag.com/roundup/358553/the-best-mobile-payment-apps> Date of access: 13 August 2018.

Mujinga, M., Eloff, M. & Kroeze, J. 2018. System usability scale evaluation of online banking services: A South African study. *South African Journal of Science*, 114(3):50–58.

Mulhere, K. 2015. Student protesters nationwide demand free tuition, \$15 minimum wage, no student debt. <http://time.com/money/4110102/million-student-march-protest-high-tuition-student-debt/> Date of access: 24 April 2016.

Munro, J.H. 2003. The medieval origins of the financial revolution: Usury, rentes, and negotiability. *International History Review*, 25(3):505-562.

Murisa, T. & Chikweche, T. 2013. Entrepreneurship and micro-finance in extreme poverty circumstances — challenges and prospects: the case of Zimbabwe. *Journal of Developmental Entrepreneurship*, 18(1):1 – 30.

Muruganantham, G. & Bhakat, R.S. 2013. A review of impulse buying behaviour. *International Journal of Marketing Studies*, 5(3):149-160.

Nagpaul, T. & Pang, J.S. 2017a. Materialism lowers well-being: The mediating role of the need for autonomy – correlational and experimental evidence. *Asian Journal of Social Psychology*, 20:11–21.

Nagpaul, T. & Pang, J.S. 2017b. Extrinsic and intrinsic contingent self-esteem and materialism: A correlational and experimental investigation. *Psychology & Marketing*, 34(6):610–622.

Nargundkar, R. 2008. *Marketing research: Text and cases*. New York: McGraw-Hill Educational.

Narteh, B. 2012. Challenges of marketing e-banking services in a developing country: the case of Ghana. *Journal of Internet Banking and Commerce*, 17(2):2-21.

National Credit Regulator. 2017. Credit Bureau Monitor. <http://debtfreedigi.co.za/credit-bureau-monitor-report-download/> Date of access: 28 June 2018.

National Credit Regulator. 2018. Credit providers, registered. http://www.ncr.org.za/register_of_registrants/registered_cp.php Date of access: 5 July 2018.

National Credit Act see South Africa.

Ndlendle, S. 2017. Men are 'Keeping up with the Joneses' more than women - Debt analysis. <https://www.iol.co.za/business-report/men-are-keeping-up-with-the-joneses-more-than-women-debt-analysis-11182287> Date of access: 13 August 2018.

Ndweni, B. 2015. How SA can improve its dismal savings rate. <http://www.fin24.com/Finweek/Business-and-economy/how-sa-can-improve-its-dismal-savings-rate-20160215> Date of access: 29 May 2016.

Neethling, J. 2006. Blacklisting of a debtor as a credit risk – Infringement of a debtor's rights to creditworthiness and earning capacity as personal immaterial property rights. *South African Mercantile Law Journal*, (18):376–382.

New Zealand Treasury. 2014. Pre-election economic and fiscal update. Wellington: New Zealand Government.

Nga, J.K.H., Yong, L.H.L. & Sellappan, R. 2011. The influence of image consciousness, materialism and compulsive spending on credit card usage intentions among youth. *Young Consumers: Insight and Ideas for Responsible Marketers*, 12(3):243-253.

Nhlapo, Z. 2018. Don't blow your credit card this year – Here's how. https://www.huffingtonpost.co.za/2018/01/22/dont-blow-your-credit-card-this-year-heres-how_a_23339731/ Date of access: 13 July 2018.

Noble, S.M., Haytko, D.L. & Phillips, J. 2009. What drives college-age Generation Y consumers? *Journal of Business Research*, 62:617–628.

Norvilitis, J.M., Merwin, M.M., Osberg, T.M., Roehling, P.V., Young, P. & Kamas, M.M. 2006. Personality factors, money attitudes, financial knowledge, and credit-card debt in college students. *Journal of Applied Social Psychology*, 36:1395–1413.

Norvilitis, J.M. & MacLean, M.G. 2010. The role of parents in college students' financial behaviours and attitudes. *Journal of Economic Psychology*, 31:55–63.

Norvilitis, J.M. & Mao, Y. 2013. Attitudes towards credit and finances among college students in China and the United States. *International Journal of Psychology*, 28(3):389-398.

Norvilitis, J.M. 2014. Changes over time in college student credit card attitudes and debt: Evidence from One campus. *Journal of Consumer Affairs*, 48:634–647.

Ntingi, A. 2008. South African credit act a worldwide hit. <https://www.fin24.com/Economy/SA-Credit-Act-a-worldwide-hit-20081102> Date of access: 9 July 2018.

Nzukuma, K. 2017. Everyone knows how Gordhan feels. <https://m.fin24.com/Budget/Budget-and-Economy/everyone-knows-how-gordhan-feels-20170307>. Date of access: 30 August 2018.

Old Mutual. 2018a. Unsecured loans vs secured loans. <https://www.oldmutualfinance.co.za/blog/personal-loans/unsecured-loans-vs-secured-loans> Date of access: 28 June 2018.

Old Mutual. 2018b. How South Africans in their 20s and 30s are saving and spending their money. <https://businesstech.co.za/news/finance/248877/how-south-africans-in-their-20s-and-30s-are-saving-and-spending-their-money/> Date of access: 16 July 2018.

O'Neill, B. 2010. Consumer credit: A primer for financial service professionals and their clients. *Journal of Financial Service Professionals*, September:56–69.

Omarjee, L. 2018. New vehicle sales exceed industry expectations. <https://www.fin24.com/Economy/South-Africa/new-vehicle-sales-exceed-industry-expectations-20180703> Date of access: 16 July 2018.

Ordabayeva, N. & Chandon, P. 2010. Getting ahead of the Joneses: When equality increases conspicuous consumption among bottom-tier consumers. *Journal of Consumer Research*, 38(1):27-41.

Orme, J.G. & Combs-Orme, T. 2009. Multiple regression with discrete dependent variables. 1st ed. New York: Oxford University Press.

O'Sullivan, A. & Sheffrin, S.M. 2003. Economic principles in action. New Jersey: Pearson Prentice Hall.

Otto, J. 2010. The history of consumer credit legislation in South Africa. *Fundamina*, 16(1):257-273.

Ozimek, P., Bierhoff, H. & Hanke, S. 2018. Do vulnerable narcissists profit more from Facebook use than grandiose narcissists? An examination of narcissistic Facebook use in the light of self-regulation and social comparison theory. *Personality and Individual Differences*, 124:168–177.

Palan, K.M., Morrow, P.C., Trapp, A. & Blackburn, V. 2011. Compulsive buying behavior in college students: The mediating role of credit card misuse. *The Journal of Marketing Theory and Practice* 19:81–96.

Pallant, J. 2016. SPSS survival manual: a step by step guide to data analysis using SPSS. 6th ed. England: Open University Press.

Park, H.J. & Burns, L.D. 2005. Fashion orientation, credit card use, and compulsive buying. *Journal of Consumer Marketing*, 22:135–141.

Parment, A. 2013. Generation Y vs. Baby Boomers: Shopping behavior, buyer involvement and implications for retailing. *Journal of Retailing and Consumer Services*, 20:189–199.

Parumasur, S.B. & Roberts-Lombard, M. 2013. *Consumer behaviour*. 2nd ed. Cape Town: Juta.

Patel, A.D. 2016. Everything you need to know about NSFAS. <http://www.thedailyvox.co.za/everything-you-need-to-know-about-nsfas/> Date of access: 24 April 2016.

Pather, L. 2014. SA student spend report 2014 presentation. <http://www.studentmarketing.co.za/research-sa-student-spend-report-2014/sa-student-spend-report-2014-presentation> Date of access: 12 June 2014.

Pattarin, F. & Cosma, S. 2012. Psychological determinants of consumer credit: the role of attitudes. *Review of Behavioural Finance*, 4(2):113-129.

Pendery, D. 2009. Three top economists agree 2009 worst financial crisis since great depression; risks increase if right steps are not taken. <http://www.reuters.com/article/2009/02/27/idUS193520+27-Feb-2009+BW20090227> Date of access: 30 July 2014.

Peng, B. 2007. Relative deprivation, wealth inequality and economic growth. *Journal of Economics*, 94:223 – 229.

Peyper, L. 2017. Youth vulnerable as unemployment stays at highest rate since 2003. <http://www.fin24.com/Economy/youth-vulnerable-as-unemployment-stays-at-highest-rate-since-2003-20170807> Date of access: 18 October 2017

Piacentini, M. & Mailer, G. 2004. Symbolic consumption in teenagers' clothing choices. *Journal of Consumer Behaviour*, 3(3):251-262.

Pinto, M.B., Parente, D.H. & Palmer, T.S. 2000. Materialism and credit card use by college students. *Psychological Reports*, 86:643–652.

Pinto, M.B., Parente, D.H., & Palmer, T.S. 2001. College student performance and credit card usage. *Journal of College Student Development*, 42(1):49-58.

Phau, I. & Woo, C. 2008. Understanding compulsive buying tendencies among young Australians: the roles of money attitude and credit card usage. *Journal of Marketing Intelligence and Planning*, 26(5):441-60.

Ponchio, M.C. & Aranha, F. 2008. Materialism as a predictor variable of low income consumer behaviour when entering into instalment plan agreements. *Journal of Consumer Behaviour*, 7:21-34.

Posel, D. 2010. Races to consume: Revisiting South Africa's history of race, consumption and the struggle for freedom. *Ethnic and Racial Studies*, 33:157–175.

Postel, V. 2008. Inconspicuous consumption. <http://www.theatlantic.com/magazine/archive/2008/07/inconspicuous-consumption/306845/> Date of access: 14 December 2015.

Pradipto, Y.D., Winata, C., Murti, K. & Azizah, A. 2016. Think again before you buy: The relationship between self-regulation and impulsive buying behaviours among jakarta young adults. *Social and Behavioural Sciences*, 222:177–185.

Prajapati, S.G. & Rathod, K.L. 2013. A study on impulse buying behaviour of college students for branded apparels in Ahmedabad city. *International Journal of Management*, 4(6):128-134.

Pretorius, W. 2016. #Feesmustfall leaders present list of demands. <http://www.news24.com/SouthAfrica/News/feesmustfall-leaders-present-list-of-demands-20160113> Date of access: 24 April 2016.

Prinsloo, J.W. 2002. Household debt, wealth and saving. Quarterly Bulletin, December 2002. Pretoria: South African Reserve Bank.

Pritchard, M. 2013. Who are the Joneses and why are we trying to keep up with them? http://www.huffingtonpost.com/mary-pritchard/keeping-up-with-the-joneses_b_2467957.html Date of access: 19 July 2016.

Pritchard, J. 2014. Unsecured loans – Definition of unsecured loans. <http://banking.about.com/od/loans/g/unsecured.htm> Date of access: 3 June 2014.

- Rampersad, R. & Reddy, K. 2012. Ethical business practices: the Consumer Protection Act and socio-economic transformation in South Africa. *African Journal of Business Management*, 6(25):7403–7413.
- Richins, M.L. 1987. Media, materialism, and human happiness. *Advanced in Consumer Research*, 14:111-135.
- Richins, M.L. & Dawson, S. 1990. Measuring material values: A preliminary report of scale development. *Advances in Consumer Research*, 17:169-175.
- Richins, M.L. 1991. Social comparison and the idealized images of advertising. *Journal of Consumer Research*, 18(1):71-83.
- Richins, M.L. & Dawson, S. 1992. A consumer values orientation for materialism and its measurement: Scale development and validation. *Journal of Consumer Research*, 19(3):303–316.
- Richins, M.L. 2004. The material values scale: Measurement properties and development of a short form. *Journal of Consumer Research*, 31(1):209 – 219.
- Richins, M.L. 2011. Materialism, transformation expectations, and spending: Implications for credit use. *American Marketing Association*, 30(2):141 – 156.
- Richins, M.L. 2013. When wanting is better than having: Materialism, transformation expectations, and product-evoked emotions in the purchase process. *Journal of Consumer Research*, 40(1):1-18.
- Richins, M.L. & Chaplin, L.N. 2015. Material parenting: How the use of goods in parenting fosters materialism in the next generation. *Journal of Consumer Research*, 41(6):1333-1357.
- Rindfleisch, A., Burroughs, J.E. & Denton, F. 1997. Family structure, materialism, and compulsive consumption. *Journal of Consumer Research*, 23(4):312 – 325.
- Rivard, N. 2002. Money management 101 needed: Credit card use is up among students; financial literacy down. *University Business*, 5(9):17.

- Robb, C.A. & Sharpe, D.L. 2009. Effect of personal financial knowledge on college students' credit card behaviour. *Journal of Financial Counselling and Planning*, 20:25–43.
- Rook, D.W. & Fisher R.J. 1995. Normative influences on impulsive buying behaviour. *Journal of Consumer Research*, 22(3):305-313.
- Rootman, C. & Antoni, X. 2015. Investigating financial literacy to improve financial behaviour among black consumers. *Journal of Economic and Financial Sciences*, 8(2):474 – 494.
- Roth, J.D. 2008. Research reveals credit cards encourage spending. <http://www.getrichslowly.org/blog/2008/09/23/research-reveals-credit-cards-encourage-spending/> Date of access: 13 March 2014.
- Ryan, C. 2017. Micro lender puts the banking world to shame. <https://www.moneyweb.co.za/news/companies-and-deals/micro-lender-puts-the-banking-world-to-shame/> Date of access: 20 October 2017.
- Sabri, M.F., Cook, C.C. & Gudmunson, C.G. 2012. Financial well-being of Malaysian college students. *Asian Education and Development Studies*, 1(2):153-170.
- Sagenmüller, I. 2018. Student retention: 8 reasons people drop out of higher education. <https://www.u-planner.com/blog/student-retention-8-reasons-people-drop-out-of-higher-education>. Date of access: 28 August 2018.
- Sanchez, J.M. 2018. The information technology revolution and the unsecured credit market. *Economic Inquiry*, 56:914–930.
- Sandhu, N. 2015. Persuasive advertising and boost in materialism - impact on quality of life. *IUP Journal of Management Research* 14:44–60.
- Schaefer, A.D., Hermans, C.M. & Parker R.S. 2004. A cross-cultural exploration of materialism in adolescents. *International Journal of Consumer Studies*, 28:399-411.
- Schewe, C.D. & Meredith, G.E. 2004. Segmenting global markets by generational cohorts: determining motivations by age. *Journal of Consumer Behaviour*, 16(1-3):51- 63.

Schiffman, L.G., Kanuk, L.L. & Wisenblit, J. 2010. Consumer behaviour. 10th ed. Upper Saddle River: Prentice-Hall.

Schussler, M. 2011. Consumer Debt Out Of Control. <https://www.debtsafe.co.za/consumer-debt-out-of-control/> Date of access: 16 November 2017.

Segal, B. & Podoshen, J.S. 2013. An examination of materialism, conspicuous consumption and gender differences. *International Journal of Consumer Studies*, 37:189 – 198.

Schreiber, J.B., Stage, F.K., King, J., Nore, A. & Barlow, E.A. 2006. Reporting structural equation modelling and confirmatory factor analysis results: a review. *Journal of Educational Research*, 99(6):323-337.

Seven, U. & Coskun, Y. 2016. Does financial development reduce income inequality and poverty? Evidence from emerging countries. *Emerging Markets Review*, 26:34-63.

Shapiro, G.K. & Burchell, B.J. 2012. Measuring financial anxiety. *Journal of Neuroscience, Psychology, and Economics*, 5:1–11.

Sheppard, B.H., Hartwick, J. & Warshaw, P.R. 1988. The theory of reasoned action: A meta-analysis of past research with recommendations for modifications and future research. *Journal of Consumer Research*, 15:325–343.

Shezi, L. 2017. 160 000 students approved for NSFAS funding. <http://www.htxt.co.za/2017/01/24/160-000-students-approved-for-nsfas-funding/> Date of access: 6 July 2017.

Shim, S., Barber, B.L., Card, N.A., Xiao, J.J. & Serido, J. 2010. Financial socialization of first-year college students: the roles of parents, work, and education. *Journal of Youth and Adolescence*, 39:1457–1470.

Shukla, P. 2008a. Conspicuous consumption among middle age consumers: Psychological and brand antecedents. *Journal of Product & Brand Management*, 17(1):25 - 36.

Shukla, P. 2008b. Essentials of marketing research. Frederiksberg: Ventus Publishing.

- Simkovic, M. 2009. Secret liens and the financial crisis of 2008. *American Bankruptcy Law Journal*, 83:253-297.
- Silver, L., Stevens, R., Wrenn, B. & Loudon, D. 2013. The essentials of marketing research. 3rd. USA, NY: Routledge, Taylor & Francis Group.
- Simatele, M. 2015. Market structure and competition in the South African banking sector. *Procedia Economics and Finance*, 30:825–835.
- Singh, A.M. 2004. Trends in South African internet banking. *New Information Perspectives*, 56(3):187-196.
- Singleton, J. & Verhoef, G. 2010. Regulation, deregulation, and internationalisation in South Africa and New Zealand banking. *Business History*, 52(4):536-563.
- Skosana, I. 2018. Yes, education & jobs 'belong to same WhatsApp group', as SA's Malema said. <https://africacheck.org/reports/yes-education-jobs-belong-to-same-whatsapp-group-as-sas-malema-said/> Date of access: 19 April 2018.
- Smith, C. 2018a. Unsecured lending: SA sitting on another Steinhoff bubble – expert. <https://fin24.com/Economy/unsecured-lending-sa-sitting-on-another-steinhoff-bubble-expert-20180126> Date of access: 30 August 2018.
- Smith, C. 2018b. Nearly three-quarters of SA households 'financially unwell' – study. <https://www.fin24.com/Economy/nearly-three-quarters-of-sa-households-financially-unwell-study-20180814> Date of access: 15 August 2018.
- South Africa. 2005. National Credit Act (34 of 2005).
- South African Reserve Bank. 2010. Lauding the leisure class: Symbolic content and conspicuous consumption. *Review of Social Economy*, 62(3):277 – 289.
- Spaul, N. 2016. Black graduate numbers are up. <https://mg.co.za/article/2016-05-17-black-graduate-numbers-are-up> Date of access: 18 October 2017.

- Spaul, N. 2016. Important research inputs on #FeesMustFall. <https://nicspaul.com/2016/09/29/important-research-inputs-on-feesmustfall/> Date of access: 30 August 2018.
- St. John, E.P., Hu, S. & Weber, J. 2001. State policy and the affordability of public higher education: The influence of state grants on persistence in Indiana. *Research in Higher Education*, 42:401-428.
- Statistics South Africa. 2018. Mid-year population estimates 2018. <http://www.statssa.gov.za/publications/P0302/P03022018.pdf> Date of access: 11 October 2018.
- Student Village. 2017. Student spend report 2017: Brand generation buying experiences. <https://studentvillage.co.za/student-marketing/student-spend-report-2017-brand-generation-buying-experiences-2/> Date of access: 20 October 2018.
- Srinivasan, V. 2012. Multi generations in the workforce: Building collaboration. *IIMB Management Review*, 24(1):46-66.
- Steyn, L. 2016. South African banks shrug off economic storm. <http://mg.co.za/article/2016-03-10-south-african-banks-shrug-off-economic-storm> Date of access: 15 May 2016.
- Stoop, P.N. 2009. South African consumer credit policy: measures indirectly aimed at preventing consumer over-indebtedness. *South African Mercantile Law Journal*, 21:365–386.
- Summers, L. & Kroes, S. 2009. Growth in household debt: An analysis of saving and spending in Utah and the U.S. *Utah Foundation Research Report*, 689:1-6.
- Synodinos, C., Bevan-Dye, A. & de Klerk, N. 2013. Influence of conative attitudes towards green advertising on black Generation Y students' environmental behaviour. *Mediterranean Journal of Social Sciences*, 4(3):17-24.
- Tang, N. & Baker, A. 2016. Self-esteem, financial knowledge and financial behaviour. *Journal of Economic Psychology*, 54:164–176.

Tang, T.L. & Chiu, R.K. 2003. Income, money ethic, pay satisfaction, commitment, and unethical behaviour: Is the love of money the root of evil for Hong Kong employees? *Journal of Business Ethics*, 46:13–30.

The Economist. 2013. The origins of the financial crisis. Crash course. <http://www.economist.com/news/schoolsbrief/21584534-effects-financial-crisis-are-still-being-felt-five-years-article> Date of access: 30 July 2014.

The Banking Association of South Africa. 2012. South African banking sector overview. <http://www.banking.org.za/docs/default-source/publication/banking-sector-overview.pdf?sfvrsn=6> Date of access: 12 June 2018.

Thomas, S. 2015. Household savings: A growing crisis. <http://www.financialmail.co.za/moneyinvesting/2015/07/30/household-savings-a-growing-crisis> Date of access: 29 May 2016.

Thompson, J.A. 2007. Why work in perioperative nursing? Baby boomers and Generation Xers tell all. *AORN Journal*, 86(4):564-587.

Tiggemann, M., Hayden, S., Brown, Z. & Veldhuis, J. 2018. The effect of Instagram “likes” on women’s social comparison and body dissatisfaction. *Body Image* 26:90–97.

Tokunaga, H. 1993. The use and abuse of consumer credit: Application of psychological theory and research. *Journal of Economic Psychology*, 14:285-316.

Tsang, J., Carpenter, T.P., Roberts, J.A., Frisch, M.B. & Carlisle R.D. 2014. Why are materialists less happy? The role of gratitude and need satisfaction in the relationship between materialism and life satisfaction. *Personality and Individual Differences*, 64:62-66.

Tumen, S. & Boaz, S. 2008. The effect of student loan schemes on students returning to study. *Journal of Higher Education Policy and Management*, 30(4):401–414.

Ungerer, L.M. 2014. Transformative consumer research: Its origins and possible enrichment of the field of consumer research in South Africa. *South Africa Journal of Industrial Psychology*, 40(1):1-15.

Usher, A. 2005. Global debt patterns: An international comparison of student loan burdens and repayment conditions. Toronto: Educational Policy Institute.

Vakil, C. 2017. Students spend more money a year than the average South African — marketing agency. <https://mg.co.za/article/2017-05-23-students-spend-more-money-a-year-than-the-average-south-african-marketing-agency> Date of access: 30 July 2018.

Van Broekhuizen, H., van der Berg, S. & Hofmeyr, H. 2016. Higher education access and outcomes for the 2008 national matric cohort. <https://www.ekon.sun.ac.za/wpapers/2016/wp162016> Date of access: 28 August 2018.

Van der Merwe, M., Ngalo, A. & Redelmeier, R. 2018. Youth unemployment in focus: When you're job-hunting so long that you're no longer young. <https://www.dailymaverick.co.za/article/2018-04-16-youth-unemployment-in-focus-when-youre-job-hunting-so-long-that-youre-no-longer-young/#.Wtis7YhubIU> Date of access: 19 April 2018.

Van Rooi, L. 2011. Generation Y and the concept of family. An introductory study of the unique characteristics of Generation Y with specific reference to the concept of family within the context. *Nederduitse Gereformeerde Teologiese Tydskrif*, 52:43–51.

Van Zyl, S.J. 2017. Student spend report 2017. <https://www.slideshare.net/SamanthaJoanneVanZyl/student-spend-report-2017> Date of access: 30 July 2018.

Veblen, T. 1899. The theory of the leisure class. New York: Penguin.

Ventura, J. & Voth, H.J. 2016. Debt into growth: How sovereign debt accelerated the first industrial revolution. *National Bureau of Economic Research*, June 2015:1-31.

Vermeulen, J. 2018. Fines and “name and shame” list for debit order chancers in South Africa. <https://mybroadband.co.za/news/banking/267811-fines-and-name-and-shame-list-for-debit-order-chancers-in-south-africa.html> Date of access: 11 July 2018.

Verplanken, B. & Herabadi, A. 2001. Individual differences in impulse buying tendency: Feeling and no thinking. *European Journal of Personality*, 15:71-83.

Virkar, S. 2015. The politics of access to information: Exploring the development of software platforms and communications hardware in the digital age. Handbook of research on trends and future directions in big data and web intelligence. IGI Global.

Vorster, G. 2018. Cell C reports 12% revenue growth as it gains subscribers <https://businesstech.co.za/news/mobile/226611/cell-c-reports-12-revenue-growth-as-it-gains-subscribers/> Date of access: 24 July 2018.

Waarts, E., Koster, J.M.D., Lamperjee, N., Peelen, E., Thomas, M. & Palowoda, S. 1997. The international encyclopaedia of marketing. Oxford: Butterworth Heinemann.

Walker, I. & Zhu, Y. 2011. Differences by degree: Evidence of the net financial rates of return to undergraduate study for England and Wales. *Economics of Education Review*, 30:1177–1186.

Wang, J. & Xiao, J.J. 2009. Buying behaviour, social support and credit card indebtedness of college students. *International Journal of Consumer Studies*, 33:2–10.

Wang, L., Wei, L. & Malhotra, N.K. 2011. Demographics, attitude, personality and credit card features correlate with credit card debt: A view from China. *Journal of Economic Psychology*, 32:179-193.

Watson, D.C. 2015. Materialism and the five-factor model of personality: A facet-level analysis. *North American Journal of Psychology*, 17(1):133-150.

Watson, J.J. 1998. Materialism and debt: A study of current attitudes and behaviours. *Advances in Consumer Research*, 25:203-207.

Watson, J.J. 2003. The relationship of materialism to spending tendencies, saving and debt. *Journal of Economic Psychology*, 24:723-739.

Weinberg, J. 2013. The great recession and its aftermath. https://www.federalreservehistory.org/essays/great_recession_and_its_aftermath Date of access: 12 April 2018.

Weingarten, R. 2009. Four generations, one workplace: a gen X-Y staff nurse's view of team building in the emergency department. *Journal of Emergency Nursing*, 35(1):27-30.

Weston, M. 2006. Integrating generational perspectives in nursing. *The Online Journal of Issues in Nursing*, 11(2):1-10.

Wieck, K.L. 2005. Generational approaches to current nursing issues: How younger and older nurses can coexist. *ISNA Bulletin*, August, September, October:27-31

Wiese, M. 2008. A higher education marketing perspective on choice and information sources considered by South African first year university students. Pretoria: University of Pretoria.

Wilkinson, K. 2015. Are 80% of South African schools 'dysfunctional'? <https://africacheck.org/reports/are-80-of-south-african-schools-dysfunctional/> Date of access: 19 April 2018.

Williams, K.C., Page, R.A., Petrosky, A.R. & Hernandez, E.H. 2010. Multi-generational marketing: descriptions, characteristics, lifestyles and attitudes. *Journal of Applied Business and Economics*, 11(2):1-17.

Williams, C.J. 2012. Euro crisis imperils recovering global economy, OECD warns. https://latimesblogs.latimes.com/world_now/2012/05/eurozone-crisis-global-economy.html Date of access: 30 July 2014.

Wolf, E.J., Harrington, K.M., Clark, S.L. & Miller, M.W. 2013. Sample size requirements for structural equation models: An evaluation of power, bias, and solution. *Propriety Educational and Psychological Measurement*, 76(6):913–934.

Wyse, S.E. 2011. What is the difference between qualitative research and quantitative research? <https://www.snapsurveys.com/blog/what-is-the-difference-between-qualitative-research-and-quantitative-research/> Date of access: 28 March 2017.

Xiao, J.J., Noring, F.E. & Anderson, J.G. 1995. College students' attitudes towards credit cards. *Journal of Consumer Studies and Home Economics*, 19:155-174.

Xiao, J.J., Noring, F.E. & Anderson, J.G. 1997. College students and credit cards: Do attitudes affect behaviour? *The Journal of Consumer Affairs*, 15:25-35.

- Xiao, J.J., Tang, C., Serido, J. & Shim, S. 2011. Antecedents and consequences of risky credit behaviour among college students: Application and extension of the theory of planned behaviour. *Journal of Public Policy & Marketing*, 30 (2):239–245.
- Xu, Y. 2008. The influence of public self-consciousness and materialism on young consumers' compulsive buying. *Young Consumers*, 9:37–48.
- Yamauchi, K.T. & Templer, D.I. 1982. The development of a money attitude scale. *Journal of Personality Assessment*, 46(5):522-528.
- Yang, C. 2016. Instagram use, loneliness, and social comparison orientation: Interact and browse on social media, but don't compare. *Cyberpsychology, Behavior, and Social Networking*, 19:703–708.
- Yoon, H.J., La Ferle, C. & Edwards, S.M. 2016. A normative approach to motivating savings behavior: The moderating effects of attention to social comparison information. *International Journal of Advertising*, 35:799–822.
- Yun, D. & Silk, K. 2011. Social norms, self-identity, and attention to social comparison information in the context of exercise and healthy diet behaviour. *Health Communication*, 26:275–285.
- Zikmund, W.G. 2003. *Essentials of marketing research*. 2nd ed. Thomson. South-Western.
- Zikmund, G.W. & Babin, J.B. 2013. *Essentials of marketing research*. 5th ed. South-Western, Cengage Learning.

APPENDIX A

QUESTIONNAIRE



CREDIT USAGE INTENTIONS AMONG GENERATION Y STUDENTS

Dear Student

My name is Pieter van Schalkwyk and I am a PhD student at the North-West University, Vaal Triangle Campus under the supervision of Professor Ayesha Bevan-Dye.

The purpose of this study is to determine how materialism and status consumption influence credit usage intentions. The study specifically focuses on Generation Y students as Generation Y make up 40 percent of South Africa's total population and students are recognised to be the leaders of the tomorrow. Generation Y refers to individuals born between 1986 and 2005.

Please take a few minutes to complete the attached questionnaire. It should not take you longer than 20 minutes. All responses are confidential and will merely be outlined in the form of statistical data in the analysis. Data will only be used for research purposes.

Thank you for your valuable contribution to this study.

PJ van Schalkwyk

North-West University

083 464 2756

Schalkpjvs@gmail.com

Questionnaire

Section A: Demographical information

Please mark each question with a cross (X) in the appropriate box.

A1.	Name of Institution	Traditional university: Campus A	Traditional university: Campus B	University of technology	Comprehensive university
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A2.	Age	>18	18	19	20	21	22	23	24	25	26	26<
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A3.	Gender	Male	Female
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A4.	Academic year	First year	Second year	Third year	Fourth year	Post graduate
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A5.	Home Province	1. Gauteng	2. Eastern Cape	3. Limpopo	4. KwaZulu-Natal	5. Mpumalanga
		6. Western Cape	7. Northern Cape	8. North-West	9. Free State	10. International student

A6.	Home Language						
		1. Xitsonga	2. Sesotho	3. siSwati	4. Sesotho sa Leboa	5. TshiVenda	6. Setswana
		7. isiNdebele	8. English	9. Afrikaans	10. isiZulu	11. isiXhosa	12. Other

Section B: Current Credit Usage

Please indicate all the options that apply to you at each question making a cross (X) in the appropriate block

B1.	Please indicate which types of credit you currently use (select all that applies to you)			1. I do not use any credit
2. NSFAS	3. Personal loan	4. Micro loan	5. Student loan	
6. Loan from family or friends	7. Store cards/account	8. Credit Card	9. Cell phone contract	
10. Other, please specify:				

B2.	What is your main sources of income? (select all that applies to you)	
1. Bursary	2. Loan	
3. I work part-time/fulltime	4. Parents, family or friends or partner	

B3.	What have you recently purchased on credit? (select all that applies to you)		
1. Electronics such as a TV, PC or Laptop	2. Furniture	3. Cell-phone contract	4. Fuel or travel expenses
5. Medical expenses	6. Textbooks	7. Health and beauty	8. Entertainment
9. Food and groceries	10. Clothes	11. Jewellery	12. Other

B4.	How are you managing your debt/payments?		
1. I am behind on my payments	2. I am struggling to keep up	3. I keep up but struggle from time to time	
4. I easily keep up	5. I do not pay my own accounts		

B5.	Please indicate which of the following influence your decision to use credit? (select all that applies to you)		
1. Interest free accounts	2. Discounts and promotions	3. Prestige	
4. Loyalty points	5. Safer than carrying cash	6. Availability of emergency funds	
7. It is more convenient	8. Ability to pay later		

B6.	Which funding options have you researched or applied: (select all that applies to you)		
1. NSFAS	2. Government bursaries	3. Private sector bursaries	
4. Eduloan	5. Student loans from banks	6. Bursaries from universities	

B7.	What is your biggest financial concerns? (select all that applies to you)		
1. Class fees	2. Loans	3. Textbooks	
4. Food	5. Travel	6. Residence fees/rent	
7. Other, please specify:			

Section C: Credit attitude

Please indicate the extent to which you agree or disagree with each of the following statements using a cross (X) in the appropriate block where 1= strongly disagree and 6= strongly agree.

		Strongly Disagree	Disagree	Slightly Disagree	Slightly Agree	Agree	Strongly Agree
C1M	I admire people who own expensive homes, cars and clothes	1.	2.	3.	4.	5.	6.
C2M	The things I own say a lot about how well I'm doing in life	1.	2.	3.	4.	5.	6.
C3M	Buying things gives me a lot of pleasure	1.	2.	3.	4.	5.	6.
C4M	I like a lot of luxury in my life	1.	2.	3.	4.	5.	6.
C5M	My life would be better if I owned certain things I don't have	1.	2.	3.	4.	5.	6.
C6M	I'd be happier if I could afford to buy more things	1.	2.	3.	4.	5.	6.
C7S	I would buy a product just because it has status	1.	2.	3.	4.	5.	6.
C8S	I am interested in new products with status	1.	2.	3.	4.	5.	6.
C9S	I would pay more for a product if it had status	1.	2.	3.	4.	5.	6.
C10S	The status of a product is important to me	1.	2.	3.	4.	5.	6.
C11AM	Money is a symbol of success	1.	2.	3.	4.	5.	6.
C12AM	Money represents personal achievements	1.	2.	3.	4.	5.	6.
C13AM	Money is motivation	1.	2.	3.	4.	5.	6.
C14AM	I am motivated to work hard for money	1.	2.	3.	4.	5.	6.

C15IB	I often buy things spontaneously	1.	2.	3.	4.	5.	6.
C16IB	'Just do it' describes the way I buy things	1.	2.	3.	4.	5.	6.
C17IB	I often buy things without thinking	1.	2.	3.	4.	5.	6.
C18IB	'I see it, I buy it' describes me	1.	2.	3.	4.	5.	6.
C19IB	Sometimes I feel like buying things on the spur of the moment	1.	2.	3.	4.	5.	6.
C20IB	I buy things according to how I feel at the moment	1.	2.	3.	4.	5.	6.
C21IB	I do not plan most of my purchases	1.	2.	3.	4.	5.	6.
C22IB	Sometimes I am a bit reckless about what I buy	1.	2.	3.	4.	5.	6.
C23SOC	When I see what others own, such as clothes or a car, I often wish I could own it too	1.	2.	3.	4.	5.	6.
C24SOC	I often compare what I have with what my friends have	1.	2.	3.	4.	5.	6.
C25SOC	I would be happy if I had nicer things than other people	1.	2.	3.	4.	5.	6.
C26SOC	I often compare my possessions with those that other people have	1.	2.	3.	4.	5.	6.
C27SOC	When I see someone with newer technology than I have (e.g. cell phone, MP3 player), I want to go out and get it myself	1.	2.	3.	4.	5.	6.
C28SOC	I often learn about new things I want to own by seeing what my friends and other people I admire have	1.	2.	3.	4.	5.	6.
C29SOC	I feel poor compared to most of my friends	1.	2.	3.	4.	5.	6.
C30SOC	I often buy things I can't really afford so that I will look better for my friends	1.	2.	3.	4.	5.	6.
C31CA	Credit cards are a status symbol	1.	2.	3.	4.	5.	6.

C32CA	Credit cards and credit accounts help people build a credit history	1.	2.	3.	4.	5.	6.
C33CA	Credit cards and credit accounts are a convenient way for people to make purchases	1.	2.	3.	4.	5.	6.
C34CA	Credit cards and credit accounts are necessary for people to get ahead in life	1.	2.	3.	4.	5.	6.
C35CA	Credit cards and credit accounts are an essential part of today's lifestyle	1.	2.	3.	4.	5.	6.
C36CA	Credit cards and credit accounts are a good thing because they allow people to enjoy their lives	1.	2.	3.	4.	5.	6.
C37CA	Credit cards and credit accounts are a good idea because they allow people to have what they need and desire now, and pay for it later	1.	2.	3.	4.	5.	6.
C38CI	I plan on applying for a credit card when I start working	1.	2.	3.	4.	5.	6.
C39CI	I plan on applying for credit accounts (e.g., store cards, loans, cell phone contracts) when I start working	1.	2.	3.	4.	5.	6.
C40CI	I plan on applying for the highest credit limit that I qualify for when I start working	1.	2.	3.	4.	5.	6.
C41CI	I plan on applying for vehicle finance to buy a car when I start working	1.	2.	3.	4.	5.	6.
C42CI	I plan on buying on credit in the future	1.	2.	3.	4.	5.	6.
C43CI	I am likely to buy on credit in the future	1.	2.	3.	4.	5.	6.
C44CI	If given the opportunity, I would buy on credit	1.	2.	3.	4.	5.	6.