THE IMPACT OF SOCIALIZATION AGENTS ON THE FINANCIAL BEHAVIOUR OF UNIVERSITY STUDENTS IN ZIMBABWE

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This dissertation is submitted in partial fulfillment of the requirements of the Bachelor of Commerce in Banking and finance honours degree in the department of banking and finance at Midlands State University

MAY 2016
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RELEASE FORM

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DEDICATIONS

This dissertation is dedicated to my adorable mother.
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I am grateful to Ms. P Kaja my lovely supervisor who walked with me at every stage with my dissertation writing. Her advice and support, her thorough comments on each chapter I presented and her insightful contributions made this dissertation a success. The values that she placed in me in doing a quality research are important. I will always be grateful for her help with building up the ideas of this topic. I also want to say thank you to Mr. Chigamba for your advice on the approach to conduct this research, his suggestions and criticisms towards the success of this dissertation. I would like to extend my gratitude to the Banking and Finance department for their assistance. To my friends Vimbai and Tafadzwa and family I would like to say thank you for your support and making this journey enjoyable. Also I would like to thank all the students who took part in my questionnaires for their time and patience.

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Special thanks
The purpose of this study was to investigate socialization factors influencing financial behaviors among university students in Zimbabwe. In this harsh economy evidenced in Zimbabwe where students’ no longer receive grants and loans, college life seems to be difficult for the university students and the situation requires one to be able to manage their finances well and to be financially literate. Theoretical and empirical literatures were both reviewed on socialization agents so as to make derivations and give the basis for a strong analysis. Studies carried out in other countries were integrated in the empirical literature review and theories such as social learning theory and consumer socialization theory were used to give a theoretical assumption for this study. An explanatory research design was used to measure the strength of relationships between socialization agents and financial behavior. A model was adopted from existing literature and essential adjustments were made to suit the properties of the study. A sample of 368 students was drawn using multi stage cluster sampling technique to allow for different probability sampling methods to be used thus making sampling effective. The conclusions of the study indicate that peer influence and media exposure are significant determinants of financial behavior among a large pool of other socialization factors. Through the use of a logistic model, the author provides a model to be used in determining financial behavior. The study recommends that there is need to set up financial literacy programs in schools particularly in primary and secondary schools. Advanced education organizations in Zimbabwe should think about including a personal financial class for students from distinctive academic levels to improve their financial knowledge particularly in the ranges of borrowing and the need to improve the cadetship scheme.
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## LIST OF ACRONYMS

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<tr>
<th>Acronym</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>CST</td>
<td>Consumer Socialization Theory</td>
</tr>
<tr>
<td>FB</td>
<td>Financial Behaviour</td>
</tr>
<tr>
<td>OECD</td>
<td>Organization for Economic Corporation and Development</td>
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</tbody>
</table>
CHAPTER 1: INTRODUCTION

1.1 Introduction

Students like any other people learn financial management earlier in life, nevertheless, it is extensively held among researchers that family experiences, in particular, often provide the foundation for the student’s financial management (Danes and Hira, 1986, Hira and Mugenda, 2000; Watchravesringkan, 2008). Previous authors who have examined the effect of socialization on financial management skills came to a conclusion that financial practices done during childhood have a significant effect on financial knowledge, financial attitude and financial behaviour in later life. Successful management of finance is not only confined to financial knowledge, but also financial attitude. (Joo and Grable, 2004; Lim, Teo, and Loo, 2003). In response to these concerns for the future wellbeing of students in later years, this research was developed with a goal of better understanding the complexities of financial behaviour of college students. In this chapter, the reader will find the background of the study, problem statement, objectives of the study, research questions, significance of the study, delimitations, assumptions, limitations, definition of terms and organization of the study.

1.2 Background to the study

Financial literacy can be defined as the skill to make appropriate financial decisions in managing one’s personal finance. Shaari et al., (2013). As crucial as this subject may be, it is very sad to note that few Zimbabweans are enlightened about financial literacy and the fact that little is done in schools and in tertiary institutions to equip students with this very essential subject. It is sad to see that this country has produced graduates and working class that don’t have the slightest idea of how to effectively prepare a simple budget of their income and expenditure, (The Herald September 2014). It is very disheartening to see some otherwise competent individuals that are distraught by personal financial problems. There are a number of people that daily seem not to have any idea on how to spend their hard-earned salary and as a result live beyond their means. The cost of living is generally high given the people’s incomes, but at the same time there are many opportunities that are missed because people have not been taught the importance of understanding financial literacy. People today are prepared to buy a lotto ticket hoping to get rich
quickly than to invest the same amount of money to learn and acquire skills to manage their finances better. (The Herald September 2014.) A good education is a great investment to help us ultimately get that dream job to earn good money. But the tragedy in some cases is that even with a well-paying job, the failure to acquire the skills and knowledge to manage our personal finances could mean that we are destined to make the wrong financial choices. (Herald September 2014)

Zimbabwe Council for Higher Education database involving six state universities was used to collect administrative data, from the findings it was discovered that the graduation rates decreased from 86% in the 2012 cohort to 76% in the 2010 cohort and 75% in the 2013 cohort. These findings coincides with the period from 2013 onwards when cadetship funds dried off. Thus the study clearly revealed a problem of increasing attrition rates creeping into the Zimbabwean higher and tertiary education system. Thus a situation like this now requires somebody who is financially literate to have the capacity to deal with their financial resources. Financial education can benefit consumers of all ages and income levels. For young adults just beginning their working lives, it can provide basic tools for budgeting and saving so that expenses and debt can be kept under control. Financial education can help families acquire the discipline to save for a home of their own and/or for their children’s education. It can help older workers ensure that they have enough savings for a comfortable retirement by providing them with the information and skills to make wise investment choices with both their pension plans and any individual savings plans. (OECD, 2005)

Some studies have alleged that the most powerful socio-economic determinant forcing students to withdraw from university is financial exigency (Bennett, 2003; Buick, 2007; Davies, 2000; Leppel, 2002; Sanders, 2002). They wrote that inadequate financial resources can said to be one of the most important reasons cited for students dropping out of university. Though this is supported very strongly by international research literature, it does not explain why so many students who are financially stable also drop out of university. This brings about the issue of financial illiteracy among students, attitude towards finances, financial behavior; budgeting, spending and planning. Students from financially stable families are seen dropping out of university prompted about by extravagant spending, financial illiteracy, inability to budget, and in some instances peer pressure from friends and colleagues. (Jones et al., 2013) supported these findings
At the Great Zimbabwe University, it appears that there are some students who have turned to the world oldest profession in order to raise fees. “Some girls engage in prostitution so they can get a good living and money for fees,” said a student from Great Zimbabwe University. “Some of the money they use to buy food and clothes. “However some students manage to get part time jobs during their course of study but that has not been easy on them. In institutions like Midlands State University rents costs between $240 and $270 per semester excluding food on top of an average fees of about $600. Other institutions like NUST charge rents of about $450 per semester on campus and about $80 per month on private residents plus an average of $600 per semester depending on programs and transport money, (The Independent, 06 March 2015). With this in mind, there emerges the need for students to have a general understanding of financial management in order to sail through university education given the tough economic situation prevailing in the nation.

The researcher being a student in one of the universities in Zimbabwe, Midlands state university, perceived that some students are engaging in abnormal behaviors such as prostitution, substance and drug abuse due to poor management of finances given by parents, which are deemed to be inadequate and not enough to sustain their wellbeing on campus which have seen students resorting to other means of surviving and trying to add to their pockets. This then questions if students have the right attitude pertaining to finances? Do they have sufficient knowledge on how to run a budget or match expenses and income, or save the few that which they are given by family. Therefore, a good understanding of what influences their financial behavior, attitude and knowledge is very crucial in providing the students with direction about what to change and promote in their road to being financially literate. And to help them make the right financial decisions.

1.3 Problem Statement

University is a source of first taste of financial independence for most young adults in Zimbabwe. Back in the day, the university system in Zimbabwe offered grants which would pay tuition and accommodation and students would get paid to learn which a very rare phenomena is nowadays. For many students now-days trying to manage the day-to day expenses is a huge challenge. Tuition costs, accommodation, food, transport and other expenses, of which many coming from generally less to do family backgrounds, it has become an important factor for one to be able to manage
finances tightly. The majority of these young people start to deal with monetary challenges such as paying bills and keeping a budget. Students are now faced with making financial decisions on whether to save, spend or invest their money and their decisions are based on their financial knowledge. The financial behaviors that college students learn during these years are likely to influence the decisions they make in the future (Shim, Xiao, Barber, & Lyons, 2009). Positive financial behaviors have a positive relationship with financial well-being, decreased financial stress and higher self-esteem. (Joo and Grable, 2004; Lim, Teo, and Loo, 2003) In this regard it is very essential to investigate which socialization factors have a significant impact on financial behavior of students in order to increase quality of their life in future years.

1.4 Research Objectives

The main objective of this study is to analyze the impact of socialization agents on financial behaviour of university students in Zimbabwe. In line with the main objectives, the research sought

- To examine university students financial behaviour
- To identify the obstacles to the level of financial literacy among students
- To ascertain if media exposure has a significant influence on financial behaviour of students

1.5 Statement of the Hypothesis

- $H_0 =$ socialisation agents significantly affect financial behaviour
- $H_1 =$ socialisation agents do not significantly affect financial behaviour

1.6 Research Questions

The research problem has given rise to the following questions;

- What is the level of financial behaviour for university students?
- What are the obstacles to the level of financial literacy among students?
- How does media exposure affect financial behaviour of students?
1.7 Significance of the study

This research is conducted to identify the socialization factors affecting the financial behavior of students, with a purpose to create financial awareness among them towards financial literacy and wellbeing. Educators and regulators are able to develop appropriate programs and design relevant financial courses to help students in managing personal money. It also helps the parents to define the factors affecting their children’s financial behavior, thus they can effectively monitor their children and ensure them on the right track of money management. Academics will also benefit from the research’s findings as it may constitute part of their reference material. Previous literature contains some investigation of college students’ financial behaviors and mostly focuses on developed countries such as the USA. In one such study, Cude et al. (2006) investigated credit card behavior using data collected from a sample of 1,891 college students in two universities in the USA. Other studies in Zimbabwe have focused on financial literacy and it’s in impact on wellbeing of students. The research findings on the effect socialization agents on financial behavior of college students will be new to Zimbabwean research

1.8 Delimitation of the study

The study will look at the influence of socialization agents on financial behaviour of students of university students in Zimbabwe. Students beyond the borders of Zimbabwe are not considered in this research hence they do not fall within the scope of this study. The targeted population to this research is university students in Zimbabwe, first year to fifth year students, since they are the main subject of the study. The targeted population has been selected using random sampling technique from the different provinces in Zimbabwe. This research will be conducted from February 2016 to May 2016 since the majority of students who are currently at universities now, range from this period.
1.9 Assumptions of the study

Before the study was undertaken the researcher made assumptions pertaining to how the study would be carried out, these assumptions are:

- Financial behaviour is only confined to keeping a budget and paying bills on time

1.10 Limitations of the study

- Only student data was collected, data from both students and parents and other agents of socialisation, churches, lecturers etc. could be useful to operationalize influences on financial behaviour. However information from the media and internet sources was utilized to bridge the gap.
- Social desirability bias might have affected some of our results since students might be reluctant to report negative financial behaviours in an attempt to appear socially correct. For instance one would report that they always draft a budget beforehand and pay bills way on time in order to appear ethically right. However, the questions were structured in a prudent way to reduce ambiguity.
- With the target population of university students which is a very large population, time and financial constraints posed a greater challenge in capturing the information from a large sample size which might result in an error. Nevertheless, this was dealt with by utilizing both probability and non-probability sampling to ensure the capturing of a true representative of the target population using the available resources

1.11 Organisation of the study

Chapter one which is the introduction outlined the background of the study with information on the effect of socialization agents on financial behaviour of students. Financial behaviour of students is dependent upon a number of factors which encompass, parental teaching, friends, experience, school, level of financial literacy and knowledge. It has also been discovered that financial attitude plays an important role in the financial behaviour of any individual. Inadequate financial resources constitute one of the most important reasons cited for students dropping out of university nowadays which then requires students to be in a position where they can properly
manage finances. Hence the study seeks to assess the effect of socialization agents on the financial behavior of students in Zimbabwe.

Chapter two covers literature review that focuses on reviewing related and relevant literature of the study. Hence, the second chapter will review the theoretical and empirical information surrounding the study. Chapter three gives a concise description of the methodology used to tackle the research objectives; it also presents an overview of the research design, as well as data collection and analysis procedures that were used. The fourth chapter will provide a thorough presentation of the research findings and provides analysis of the data gathered. Chapter five contains the summary of the study, conclusions and recommendations, highlights the solutions in addressing the statement of the problem.

CHAPTER TWO: LITERATURE REVIEW

2.1 Introduction

This chapter reviews literature related to the study. It encompasses theoretical and empirical literature. It displays familiarity to the major scholarly work published by other authors on the subject area. Various literatures relating to the study from country to country on financial
socialization agents and financial behavior were used so as to give lessons to the study. The main theories for the study are analyzed on theoretical review.

2.2 Definition of financial socialization

Financial socialization is a process in which young people acquire and develop skills, attitudes, values, standards, knowledge, norms and behaviors that contribute to their financial understanding and skills that they display (Fox et al., 2000). Socialization opportunities come from individuals, organizational, or institutional agents with whom young adults come into contact with or maintain a relationship with. In the same way, purchasing behaviors can be passed on by parents and other influential individuals, and can be taught from one generation to the other, according to social learning theory by (Gutter et al., 2009). Various studies and discussions have inferred that parents, peers, schools, and mass media play a significant role in consumer socialization (Bush, Smith, & Martin 1999; Moschis & Moore1984). Parents have more influence over their children’s financial knowledge, attitudes and behaviors than work experience and high school education combined (Shim, 2010). Parents play important roles in preparing their children to live independent lives. They teach their children how to manage financial resources not only by directly instructing them (Danes, 1994; Moschis, 1987) but also by modeling appropriate behavior (Hayhoe et al., 2000; Joo et al, 2003). The financial habits, both positive and negative, that form during one’s transition to adulthood are likely to persist throughout adulthood (Shim et al. 2009). Mandell (2008) suggested that leaving school without adequate financial knowledge to make critical affects students’ financial decision-making skills in their adult lives.

Pinto et al. (2005) found that college students learned more information about credit cards from their parents than from any other socialization agent (peers, school, or media). Lachance and Legault (2007) found that parents are the only significant social sources of consumer knowledge. It appears that most previous studies have focused on the influence of parents rather than the influence of peers, school, and the media in predicting college students’ financial knowledge. In addition, few studies have focused on the role of ethnic differences in understanding college students’ financial socialization and financial literacy. Perhaps students from different ethnic, religious or cultural backgrounds are socialized differently and these differences affect their
acquisition of knowledge in personal finance. Additional attention to family and cultural influences on college students’ financial knowledge and wellbeing is needed to illuminate this question.

Socialization is when individuals acquire from the environment those skills, knowledge, and attitudes that are necessary to maximize their consumer role in the financial marketplace (Ward, 1974). The main agents for student’s socialization are peer groups, family, schools and media and all of them occur at one point of time throughout an individual's life cycle. In a study conducted by Churchill and Moschis (1979), it is reported that family interaction about financial management declines over age and that peer communication about financial matters increases with age. This report highlights the importance of these two agents over a particular period of an individual. The family is credited with being a major source of children’s socialization; children through observing their parents, participating in financial practices, and receiving direct instruction (Beutler & Dickson, 2008; Pinto, Parent, & Mansfield, 2005). A student's family will always be his/her first shelter and role model. Parents influence their children overtly and cognitively through direct teaching, reinforcement and purposive modelling (Moschis, 1987). Children have already acquired knowledge, attitudes, and motives on most subjects that might be included in education about the consumer role before coming into the classroom. This is to show that family, especially parents, have a huge impact on the financial behaviour and literacy of an individual. The degree of education towards finance of a parent will automatically be inculcated to their children and the children will inevitably try and reciprocate this behaviour. Children learn financial management behaviour through observations and participation (incidental learning) and through intentional instruction by socialization agents (Danes & Dunrud, 1993; Moschis, 1987; Rettig & Mortenson, 1986). If the parents are responsible enough to inculcate their values of financial knowledge to their child, the latter will be financially literate even before going to school attending financial literacy curriculums. Research has shown that the amount of television viewed is positively related to adolescents’ purchase requests, brand recognition, materialistic attitudes, and financial behaviour. By analyzing the study, we find that students think that the media is a medium for them to become financially literate. Previous research has emphasized that parents, peers, printed media, television commercials, and in – school education are the most important agents of consumer socialization (Chan & McNeal, 2006). Hence, it can be considered that childhood consumer
experience, personal and family background and student characteristics may have an important role on financial literacy of students

2.3. Theories of socialization

Socialization process is found upon a number of theories, which are mainly behavioral and social. These theories have been put to practice in order to understand and interpret human behavioral outcomes. These theories have helped to explain socialization of the consumer, buying and spending patterns.

2.3.1 Social Learning Theory

The assumption of social learning is that people can imitate others by observing, and modelling their behaviors, emotional reactions and attitudes. (Bandura, 1977; Gutter et al., 2009). Research by Bandura (1977) and Gutter et al. (2009) depicted that learning through imitation can teach new behaviors in a quick and efficient way and increase the frequency of similar behaviour. It is against this background that parents and teachers ought to understand the potential impact that financial socialization may have on financial behaviors and attitudes and also to note and understand the foundation of the idea of socialization. In his Social Learning Theory, Alfred Bandura (1963, 1977) posited that people learn their own behaviors and attitudes by observing the behaviors and attitudes of significant people in their lives. This process of learning through observing others is called modeling. Social Learning Theory has been applied extensively to understanding the modification of behaviors. Strategies based on Social Learning Theory have been effective in reducing alcohol abuse among students (Foss, Deikman, Bartley, & Goodman, 2004, Perkins & Craig, 2002), reducing or delaying tobacco use at colleges and universities (Hancock & Henry, 2003), and preventing sexual assault and eating disorders (Berkowitz, 2003). According to Bandura (1977), the four conditions necessary for effective modeling: attention, retention, reproduction, and motivation. In order for modeling to be effective, the observer must pay close attention to the behavior or attitude, must be able to recall the behavior or attitude, must be able to reproduce the behavior or attitude themselves, and must have some motivation to reproduce the behavior or attitude. One example of this socialization is a child who observes their parent’s behavior and then emulates that behavior. Because modeling has an important impact on behavior change, Bandura
(1977) proposed that new behaviors could be taught more quickly and more efficiently through modeling.

- Alfred Bandura`s famous experiments called the “bobo doll”, demonstrates that children copy certain behaviors especially through observing other people and imitate those behaviors. (Boeree, 1998). The children in Bandura’s investigations watched an adult person acting violently to a bobo doll. When those children were later permitted to enter in a room with the bobo doll and play with it, they started imitating the hostility actions they previously watched, (Boeree, 1998). Bandura recognized three fundamental models of observational learning:

  - Symbolic – involves real or fictional characters that display a behavior through radio, television or any form of media.
  - Live model - where actual person is showing the desired behavior
  - Verbal instruction – descriptions and explanations of a certain behavior to someone in how to engage in the behavior

While some studies believed that learning led to a permanent change in behavior, observational learning demonstrates that people can learn new information without necessarily demonstrating new behaviors, (Huitt, 2004). Not every single watched behavior is effectively learned. Components involving both the model and the learner can assume a part in whether the social learning is effective, certain requirements and steps should also be taken, into account (Bandura, 1977). Boeree, (1998), asserts that the following steps should be included in the observational learning and modeling process:

- Motivation – here he states that a person cannot do anything unless he or she is motivated and so one have to be motivated to do the behavior observed and he suggests reinforcement or punishment as motivational strategies.
- Retention – observers must be able to remember features of the behavior in order to reproduce the behavior and again it is impacted by the characteristics of the observer.
• Attention – you need to pay attention to the modeled behavior in order to learn. Attention is impact if the modeled behavior is of relevance and depending by the characteristics of the observer

• Reproduction – once the observer has paid attention, stored or retained the information, there is need to produce the behavior. That’s when you perform the observed behavior and practice of the behavior lead to skill advancement and improvement

Children develop and acquire consumer behavior from their parents, (Calamatao, 2010). According to this theory, parents in particular, socialize children by passing on social values and by controlling behavior through reinforcement, rewards or punishments (Liao & Cai, 1995). The key principle of this theory is that children learn behavior and develop attitudes through the reinforcement of parents, (Calamatao, 2010).

The social learning theory states that children’s behaviour and attitudes are shaped by parents who transfer norms and social values to their kids, financial socialization agents are consistent with the theory, (Calamatao, 2010). Studies have proved that children learn consumer behaviour from their parents who are the most important agent of socialization, (Calamatao, 2010). Financial behaviour is an important topic that needs to be learnt and to be addressed earlier in life. Parental involvement, support and commitment to pass financial knowledge to their children, results in an increase of children’s levels of financial literacy, (Calamatao, 2010).

According to Pinto et al., (2005) while 75% of American children learn the most about how to manage money from their parents, 87% of college students and 90% of high school students rely on their parents for financial advice (Pinto et al., 2005). Two additional surveys conducted by the JumpStart Coalition and the American Savings Education Council concluded that nearly all the teenagers learned most about money management from their parents (Lucey & Giannangelo, 2006). The fact that the majority of the students turned out to be financially literate as a result of their parents’ involvement in teaching them financial skills is consistent with the basics of the social learning approach which views parents as the most important influence on consumer behavior (Lucey & Giannangelo, 2006; Pinto et al., 2005).
2.3.2 Consumer Socialization Theory

Consumer Socialization Theory (CST) is whereby young people develop consumer-related attitudes, knowledge and skills (Moschis & Churchill, 1978). There are three main components of the CST: antecedents, socialization processes, and behavioral outcomes. Antecedents of the consumer socialization model involve both personal attributes and environmental surroundings (Moschis & Churchill, 1978). Personal attributes can include, but are not limited to, family structure, socioeconomic status, educational level, age, gender, and ethnicity (Bush et al., 1999; Moschis & Churchill, 1978). Antecedent variables can directly and indirectly affect a consumer and how they interact with socialization agents and influence behaviors (Moschis & Churchill, 1978). Socialization agents influence an individual to develop similar norms, attitudes, and behaviors through socialization processes. Socialization agents “can be a person or organization that has frequent contact with the learner, primacy over the individual, and control over rewards or punishments given to the learner” (Moschis & Churchill, 1978, p.600). Thus, socialization agents are viewed as the primary influential force on the behaviors of an individual, who is considered to be inactive in the socialization process (Bush, Smith, & Martin, 1999). Socialization agents can include family members, peers, mass media, religion, teachers, and mentors etc (Moschis & Churchill, 1978). Antecedents and socialization agents influence the outcomes within the CST. Not only do the socialization agents influence the outcome, but their personal attributes and environment have been found to be influential as well (Moschis & Churchill, 1978).

2.4 The Influence of Financial Socialization Agents on Financial Behaviour

Previous research has acknowledged that the following: parents, peers, printed media, religion, television commercials, and in-school education are the most important agents of consumer socialization (Moschis, 1987; Moschis & Churchill, 1978).

2.4.1 Parents

The most significant influence on children as they learn consumer behavior patterns is the parents (Caruana & Vasallo, 2003; Lachance & Legault, 2007; Hayta, 2008). Parents have been shown to be the primary source of financial information for 61 teens and college students (Pinto, Parente, & Mansfield, 2005; Lyons, Scherpf, & Roberts, 2006; Peng et al., 2007). Lyons et al. (2006) found
that the majority of college students (76.7%) indicated that they had gone to their parents for financial information. Bowen (2002), in a study of financial knowledge of teens and their parents, found the way young people learn about financial matters is likely to be a combination of intentional and unintentional strategies by parents and other key adults in their lives. Furthermore, parents play a significant role in shaping a child’s financial habits, behaviors and values (Pinto et al., 2005). Marshall and Magruder (1960) found that wise financial management by parents can lead to increased knowledge about money in their children. Reviewing the literature revealed that John (1999) and Hira (1997) considered this construct with a scale that included 11 items and found parental exposure to have a significant influence.

2.4.2 Peers

Peers become increasingly important during adolescence as children begin to wean themselves from parents and become independent beings. The influence of peer groups and friendships in childhood have long been known to be important in both emotional and cognitive development (Pressley & McCormick, 2007), but studies have also shown that peer groups contribute to effective learning about monetary values and social motivation (Moschis & Churchill, 1978; Hayta, 2008). Interaction with peers of course makes adolescents aware of fads and fashions that is, new goods and services in the marketplace and new buying patterns. This greater awareness of the consumer environment may in turn contribute to active peer interactions about consumption matters, forming a cyclical or pattern. Lachance and Legault (2007) found that normative (accepted by a reference group) and informative (source of information) peer influences were significantly related to students’ financial attitudes and behaviors towards consumption.

2.4.3 Faculty

Children spend more time in school than they do with their parents, starting in preschool and continuing into their later school years (Hayta, 2008). School as a social institution by and large reflects the requirements and objectives of society and provides young people with necessary knowledge and skills in many areas including consumption. Courses learnt at college play an important a role just as parents in shaping children’s consumption behaviors (Ozgen, 1995).
Particularly during adolescence, children spend more time at school with teachers and friends than they do with family. According to Varcoe, Petersen, Gabertt, Martin, and Costello (2001), information provided at college regarding economics has an important effect on the child in terms of acquiring and shaping skills, and behaviors related to consumption and financial management.

2.4.4 Media Exposure

Mass media such as television, radio, newspaper, and the Internet plays an important role in the socialization of adolescents (Koonce et al., 2008; Varcoe, Peterson, Swanson, & Johns, 2010) and adults as consumers (Hayta, 2008). Lachance and Legault (2007) revealed that media (television, Internet, magazines, and newspapers) were the second most important socialization influence on college students’ attitudes towards consumption (defined as credit, advertising, and commercial practices). Koonce et al. (2008) confirmed that students learned a “good amount” or “a lot” from the media, which included television, radio, newspapers, and magazines (18.1%), and the Internet (13.5%), in a positive manner.

2.4.5 Denomination

Although not yet identified as one of the most important agents of consumer socialization in current research, religion or denomination probably should be included, at least in some cultures. According to Shweder (1991), religion is one of the most universal and influential social institutions and has a favorable significant influence on people’s attitudes, values, and behaviors at both the individual and societal levels. Religious values and beliefs learnt from church are known to affect ritualistic and symbolic human behavior (Mokhlis, 2009). Bailey and Sood (1993) examined the effects of religious affiliation on consumer behavior and found variations in consumerism among different religious groups. For example, churchgoers from SDA (Seventh Day Adventist) and other Pentecostal churches like Christ Embassy, Zaoga (Zimbabwe Assemblies of God Africa) and UFIC (United Family International Church) were likely to be more informed about finances in comparison to people from other denominations, as they conventionally hold finance seminars to educate the congregation on financial management and the importance
of saving. There is considerable literature focused on culture and its influence on various aspects of consumer behavior (Mokhlis, 2009). However, little research has examined the effect of denomination specifically on financial behavior, financial knowledge, or financial wellbeing. Religion and its associated practices often play a pivotal role in influencing how individuals cope with important life transitions. This study hopes to fill this research gap by examining the effect of denomination on the financial knowledge and financial behavior of college students.

2.5 Obstacles in the level of financial literacy

Financial literacy can be measured by analysing the different components of financial literacy which are awareness, skill, attitude, knowledge, behavior (Atkinson & Messy, 2012). If an individual lacks the skills, attitude and above all is ignorant of financial concepts it is a huge challenge for them to achieve high levels of financial literacy if at all. Financial education starts from measuring the knowledge. Knowledge include how much an individual knows about financial services, their benefits and how to access them. There should be an analysis of the understanding of concepts and skills on how to use financial services and access to the technology. Attitudes towards the financial services is crucial in determining the levels of financial literacy and behavior includes if you are using the financial products or not.

Income-As much as financial literacy can be achieved at all levels of income Atkinson & Messy, (2012). Surveys conducted in most African countries discovered that low income levels can be a huge impediment to financial literacy as some individuals sited that they do not save or make long term plans due to inadequate finances or rather low income. Explanations such as borrowing to make ends meet would come up often. Low income can be an obstacle on the level of one’s financial literacy.

- Level of Education-financial literacy education plays an important role in determining the level of financial literacy, Hansol et al., (2015). Lusardi & Mitchell, (2011) studies in USA found out that individuals with lower educational attainment are less likely to be financially literate, and they attain low scores as in most cases are likely to say they don’t know the answer. Atkinson & Messy, (2012) identified a relationship between increased levels of education and high financial literacy scores in both developing and developed countries.

- Parental Teaching- Campenhout, (2015) demonstrated that low levels of financial literacy are partly due to a lack of motivation on the part of the students. Financial skills and
financial knowledge acquired at a young age act as a catalyst for sensible financial behaviour and accumulation of wealth for later years. Low levels of participation and involvement by parents in financial issues and concepts ma be an obstacle to financial literacy.

- Attitude- Atkinson & Messy, (2012) in their study of measuring financial literacy found that attitude to risk can be an obstacle to the levels of financial. The right attitude towards finances can be a great aid in making the right financial choices, conversely negative attitude in making financial decisions can be an obstacle to levels of financial literacy.

2.6 Summary

Financial socialization agents is an important topic that needs to be addressed earlier in life as it is consistent with the social learning theory and consumer socialisation theory which explains that children’s behaviour and attitudes are shaped by parents who transfer norms and social values to their kids. If parents are willing to pass financial knowledge to their children, this results in an increase of children’s levels of financial literacy and consequently their financial behaviour.

However, literature does not explore much on the effect of socialization agents on student’s ability to meet and manage personal finances but a lot of emphasis is on financial literacy and financial knowledge of college students as an influence of saving and spending habits. Much of the studies where done in developed countries such as USA, Malaysia and Turkey. According to the survey done by the researcher little attention was given to the case of developing countries such as Zimbabwe. Hence, the need to get insights from developing nations. Some of the studies used the logistic model to measure the effect of financial socialization agents or other factors that influenced financial behaviour.
CHAPTER THREE: RESEARCH METHODOLOGY

3.1 Introduction

This chapter presents the methods and tools used to gather and analyze the data pertaining to the impact of socialization agents on financial behaviour. The chapter will outline the way in which the research was conducted so as to ensure the validity and reliability of the data collected and the results thereof. It outlines research design, specification of the model to be used and justified the
variables that were used. It also presents data types and sources, and estimation procedure. The chapter ends with a summary of the main points.

3.2 Research Design

The study employed an explanatory and descriptive research design. A descriptive design has been used so as to explain information on the assessment of the effect of socialisation agents on financial behaviour of students. Explanatory research studies aims at testing hypotheses to explain the nature of certain relationships, or establish the difference among groups, or the independence of two or more factors in the situation in this case socialization agents and financial behavior. Given that there are several explanations for socialization agents the design allowed the researcher to determine which ones are the best predictors for financial behavior? Explanatory also offers the opportunity to analyze information using statistical techniques such as STATA, SSPS version 13.1, and it is fast and it removes human error and personal judgments. It also explains variables in detail and not just giving a report. Explanatory design also allows the use of both qualitative and quantitative data; hence the research used questionnaires as the data collection tools.

3.3 Model Specification

The study made use of the logistic regression analysis technique to come up with a regression equation .The resulting model specification was estimated as

\[ FB = \beta_0 + \beta_1 PE + \beta_2 PI + \beta_3 F + \beta_4 ME + \beta_5 D + \mu_i \]

Where \( FB \) = financial behavior of a student: the dependent variable.

\( \beta_0, \beta_1, \beta_2, \beta_3, \beta_4, \beta_5 \): parameters that are estimated by the method of ordinary least squares and the explanatory variables are;

\( PT = \)Parental Exposure,

\( PI = \) Peer Influence,

\( F = \) Faculty,
\[ \text{ME} = \text{Media Exposure}, \]
\[ R = \text{Denomination}, \]
\[ \mu = \text{error term} \]

### 3.4 Justification of Variables

The variables used in this study were used in other studies but however those studies were conducted in other countries resulting in the researcher to leave and bring other variables to match this study which is in Zimbabwe. From the variables selected, the researcher observed the ones which highly influenced financial behavior of students.

#### 3.4.1 Parental Teaching

This variable refers to father and mother or the guardians of the student. Direct teaching of finance by parents was measured as in Shim et al. (2009) by asking the students to indicate whether their parents talked to them about the following personal finance topics while growing up: the importance of savings etc. The likert scale ranging from strongly agree to strongly disagree ranging from 0 to 5 was generated, where a score of 1 indicates no discussion in any of the areas, while a score of 5 indicates discussion in all 5 areas. Influence of family or parental teaching on students decreases as they grow up, students now listen to their peers more (Churchill and Moschis 1979) In this view a negative relationship is expected is expected between parental teaching and financial behaviour.

#### 3.4.2 Peer Influence

Peer influence refers to the friends and colleagues of student that influence his/her decision making. the variable peer influence used the likert scale ranging from strongly agree to strongly disagree ranging from 0 to 5 was generated, where a score of 1 indicates no discussion in any of the areas, while a score of 5 indicates discussion in all 5 areas, peer groups have proved to have a significant and positive role in socialization and behaviors throughout an individual’s life cycle (Moschis, 1987). A positive relationship between peer influence and financial behaviour is expected.
3.4.3 Faculty

Faculty refers to the faculty in which the student is enrolled in. Five main faculties were used for this study, i.e. Commerce, Arts, Law, Human Resource Management and Science. Which were represented by a scale of 1-5 denoting the five different faculties. This variable was found appropriate to explain financial behaviour of students. Varcoe, Petersen, Gabertt, Martin, and Costello (2001), state that education on finances provide at college has a significant effect on behaviour, however most degree programmes which are not in the faculty of commerce do not undertake any finance module in their study. In this view a negative relationship is expected.

3.4.4 Media Exposure

Mass media comprising of television, radio, newspaper, and the Internet was being referred to in this study. Buijzen & Valkenburg (2003), reported that 33% of college and high schools students use media or internet as a mean to seek financial knowledge, whereby it shown that the use of social media and amount of television viewed is positively related to financial behaviour and other materialistic attitudes. The researcher expects a positive relationship between media and financial behavior.

3.4.5 Denomination

Denomination in this study is referring to the church in which the students go to. Five denominations were selected using stratified random sampling. A scale of 1-5 was used to represent the five different denominations selected. According to Shweder (1991), religion is one of the most universal and influential social institutions and has a favorable significant influence on people’s attitudes, values, and behaviors at both the individual and societal level. The researcher expects a negative relationship between denomination and financial behaviour as very few denominations teach about finances.

3.5 Marginal effects

When using logit models, it is common to report the marginal effects after reporting the coefficients. Marginal effects reflect the change in the probability of $y=1$ given a 1 unit change in
an independent variable \( X \), (Katchova, 2013). In this case, marginal effects are reflecting a change in financial behavior given a unit change in independent variables.

### 3.6 Data Types and Sources

Chen, (1998), the students are grouped into two subgroups on the basis of middle rate of right answers of the sample, students with scores equivalent to or beneath the middle are grouped as those who are moderately failing to come up with a budget. Students with scores higher than the sample median are named as those who are able to prepare a budget. This dichotomous variable is then utilized as a part of the logistic regression as the dependent variable, which is clarified by the independent variables; parental exposure, peer influence, faculty, media exposure and denomination.

The study will utilize primary information as it gives direct data which is applicable and particular to the topic. This will be attainable through the use of questionnaires adopted from the OECD questionnaire in Atkinson & Messy, (2013) and other sources. Data is being collected from Zimbabwean registered students. Garwe, (2015), there are 85,556 students studying under the different Universities in Zimbabwe. Universities were divided into two stratas which were private and state universities. Random sampling was then used to pick 5 from the 13 universities in Zimbabwe to reduce bias, which saw the outcome of three state and 2 private universities being considered. The selected institutions were Midlands state University, University of Zimbabwe, Great Zimbabwe University, Africa University and Solusi University. Use of an attendance register was used to select the students, random sampling technique was employed, where every odd number was considered to come up with the target sample size. The multi-stage cluster sampling technique was used in the selection of a representative sample for this study. The sampling technique was chosen due to its ability to divide large clusters of population into smaller clusters and also allows different probability sampling methods to be used thus making sampling effective.

### 3.7 Target Population

Because of the extensiveness of the target population, the researcher will utilize a delegate sample to make surmising on the target population. The target percentages were derived from the total
populace of each university below, the university with the highest population would have a higher target percentage to account for the large numbers in order to increase true representation. Which saw Midlands State University (MSU) having the highest population of about 20,018 students which is explained by the higher percentage of 40%, while on the other end Solusi University has a very low populace of about 5,000 students which is being explained by the lowest target percentage of 10%.

Table 3.1 Target Population: Registered Students

<table>
<thead>
<tr>
<th></th>
<th>Percentage</th>
<th>Targeted Respondents</th>
</tr>
</thead>
<tbody>
<tr>
<td>UZ</td>
<td>25%</td>
<td>95</td>
</tr>
<tr>
<td>GZU</td>
<td>20%</td>
<td>80</td>
</tr>
<tr>
<td>MSU</td>
<td>40%</td>
<td>150</td>
</tr>
<tr>
<td>SOLUSI</td>
<td>10%</td>
<td>40</td>
</tr>
<tr>
<td>AU</td>
<td>15%</td>
<td>65</td>
</tr>
<tr>
<td>Total</td>
<td>100%</td>
<td>400</td>
</tr>
</tbody>
</table>

3.4.1 Sample Size

The research adopted the Cochran’s (1963) sample size determination model. As per the model as a confidence level of 95%, 5% sampling error and 48% male and 52% female population proportion. The population proportion were chosen basing on the results of the Zimbabwean 2012 census which showed that there are 48% males and 52% females in Zimbabwe, therefore the research population research calculated as shown below:

\[
n_0 = \frac{1.96^2 \times 0.48 \times 0.52}{0.05^2} \approx 368.05 \approx 368
\]

The model showed the representative population should consist of 368 respondents, but however the researcher added some more 32 respondents to cater for questionnaires which may not be returned.
3.8 Data Validation and Reliability

To guarantee that the questionnaires accomplished their goals by giving substantial and dependable information, pilot surveys were outlined and distributed amongst fellow students. From this pilot study, the researcher made changes in accordance with the questionnaire to guarantee their viability in measuring the proposed variables. Additionally, the researcher guaranteed that dependable data is acquired from the research by checking reactions to connected inquiries for consistency and removing those responses from respondents who need consistency. Cronbach alpha was used to test for reliability of the questionnaire and data that is above 60% is found reliable, Alhenawi, (2013).

3.9 Estimation Procedures

The researcher adopted the ordinary least squares (OLS) in estimating the equation and the beta parameters. The method uses a statistical technique to come up with the best linear unbiased estimates under specific assumptions. The procedure includes estimating the coefficients from beta zero to beta five by minimizing the sum of squares of the errors between the actual values of FB and values of FB predicted by the equation. The true and real estimates of beta are unknown, but the regression model is utilized to try and estimate them. The value of beta zero is a constant term in the model. \( \mu \) captures the unstated independent or explanatory variables of the equation. A statistical package STATA 13.1 was used to estimate the regression equation.

An arrangement of statistical assumptions underlies the method for ordinary least squares. One assumption to consider is that all significant logical variables have been incorporated into the model subsequently the model is practical and right. On the off chance that assumptions are violated the outcomes for estimates will be conflicting and one-sided. To address this, diagnostic tests were done aimed at distinguishing circumstances where the set assumptions may have been destructed in order to create better results

3.9.1 Diagnostic tests

These are statistical tests aimed at testing how well the model has been satisfied.
3.9.2 Multicollinearity tests

If illustrative variables are more positively or conflictingly connected with each other, then the issue of multicollinearity exists. That is if two or more informative variables (for instance peer influence and media exposure) show evidence of a flawless direct relationship, it gets the opportunity to be hard to make sense of and think of parameters of the equation, in any case, you can't disconnect the effect of each independent variable on the dependent variable. If an in number interrelationship exists it gets the chance to be difficult to evaluate the individual effect of every independent variable on the dependent variable. Along these lines, variables ought to be less connected with show the effect of each variable and give a more representation of the model. It should be between 0.8- negative 0.8. Before proceeding with the analysis, multicollinearity among predictor variables was checked by ensuring that tolerance values did not exceed 0.1 and that variance inflation factors were below 10 as suggested by Hair et al. (2009).

3.9.3 Heteroskedasticity

You can test for Heteroskedasticity using the Breusch-Pagan/Cook-Weisburg”s. The test was done under the null hypothesis of homoskedasticity in the residuals. The null hypothesis assumes that the errors are homoskedastic and independent of the regresses. The test indicates whether the explanatory variables are able to explain the variations in the dependent variable.

3.10 Summary

The research stressed more on the research methodology that was used in the study. The explanatory and the descriptive research methodology were taken into consideration so as to measure and explain the variables that determine the financial behaviour among university students. The researcher went on to discuss the model specification that was adopted in order to suit the study. The various sources of data were incorporated and utilized in this study such as the primary data through the use of structured questionnaires. The various diagnostic tests which needed to be taken into consideration were discussed and the plan for data analysis and presentation were also given. This leading to the next chapter were results of the study will be presented and analyzed by the researcher.
CHAPTER FOUR: DATA PRESENTATION, INTERPRETATION AND ANALYSIS

4.1 Introduction

This chapter presents, interprets and discusses the results of the data for the study. Results that answer the research questions and the hypothesis were presented according to the methodology stated in chapter three. Primary data collected using questionnaires was analyzed using a stata 13.1 and Microsoft excel. Validation of results was done through diagnostic tests such as multicollinearity, heteroscedasticity and marginal effects. A logistic regression analysis was run. Findings of the study will be related to the results in previous literature. A summary of the entire points concludes the chapter.

4.2 Analysis of Response Rate

The research data was collected using 400 questionnaires, which were distributed using simple random sampling. Of the returned questionnaires, 32 were not properly filled and hence were not suitable for use. 368 questionnaires were left for analysis and this response rate is to use as a
sample size as representative of population for analysis, an overall response rate of 92% is sufficient enough to justify the use of responses in a research as proposed by Bryman and Bell (2003). The average age of the respondents was 22 years of age, the results also showed that 59.71% were females and 40.29% were males.

4.3 Diagnostic Tests Results
Diagnostic tests were carried out guard against the possibilities of acquiring, translating one-sided and inaccurate regression results. Results from the tests are presented in the tables beneath.

4.3.1 Reliability results
Reliability of the questionnaire was assessed with Cronbach’s alpha and its value is 0.6152 as shown below, which is more than 0.6 which means the data was reliable, (Thapa & Nepal, 2015)

<table>
<thead>
<tr>
<th>Table 4.1: Cronbach’s results</th>
</tr>
</thead>
<tbody>
<tr>
<td>Average interitem covariance</td>
</tr>
<tr>
<td>Number of items in the scale</td>
</tr>
<tr>
<td>Scale reliability coefficient</td>
</tr>
</tbody>
</table>

Source: Raw data

4.3.2 Multicollinearity Test Results
Multicollinearity exists if independent variables are more positively or negatively connected to each other. Results from multicollinearity tests are as follows;

<table>
<thead>
<tr>
<th>Table 4.2: Correlation Matrix</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fb</td>
</tr>
<tr>
<td>Fb</td>
</tr>
<tr>
<td>Peerinf</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>-------</td>
</tr>
<tr>
<td>Parentalex</td>
</tr>
<tr>
<td>Mediaexp</td>
</tr>
<tr>
<td>Faculty</td>
</tr>
<tr>
<td>Denom</td>
</tr>
</tbody>
</table>

Source: Raw data

These outcomes demonstrate that multicollinearity did not exist following all the relationship coefficients are somewhere around 0.8 and - 0.8. This shows that the effect of one independent variable on economic wellbeing is not traded off by whatever other variable, thus every one of the variables were held and utilized as a part of evaluating financial behaviour.

4.3.3 Test for Heteroscedasticity

The test for heteroscedasticity, is done to test and see whether there is constant variance between the regresses. The test is conducted under the null hypothesis (Ho) that there is a constant variance among the regresses against the alternative that constant variance across the regresses is not there. Breusch-Pagan/Cook-Weisberg test for heteroscedasticity was used in this study to test for econometric problem. The results from the test are shown in table 4.3.

Table 4.3: Breush-Pagan/Cook-Weisberg test for Heteroscedasticity

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Chi2(1)</td>
<td>0.43</td>
</tr>
<tr>
<td>Prob &gt; chi2</td>
<td>0.5123</td>
</tr>
</tbody>
</table>

Source: Raw data

The results from the test above show that there is no constant variance between the independent variables since heteroscedasticity is greater than 0.05 showing the significance of the model.

4.4 Obstacles in the Level of Financial Literacy

The study discovered that there are several obstacles to financial literacy which includes lack of skills, complex of financial concepts, borrowing, and parents. Some of these results were found by Shults, (2012) were he found six major obstacles to financial literacy facing people around the age of twenties towards financial literacy.
4.4.1 Lack of skills and complex of financial concepts

Majority of the students showed that they lack skills in calculating compound interest. 57.84% got a zero on the compound interest question and 42.16% got it correctly. Others were ignorant of financial concepts that included the concept of time value of money and the concept of high risk and return. This results in students making uninformed decisions because they lack some financial knowledge. Not knowing financial concepts also causes people to make wrong choices if they want say to invest their money. Lacking basic financial knowledge causes individuals to have a low level of financial literacy. This is in line with what Shults, (2012) stated in his research.

4.4.2 Attitude to Save

Saving shows as a positive behavior toward personal finances. Most of the students stated that they do not save and some save here and there. Results shows that 61.76% of the students have a negative attitude toward saving and 48.37% are currently not actively saving. Most of the students stated that they do not have a budget because a lot of students mentioned that they like spending money when it’s there and currently they are not actively saving because they stated that they receive money that is not enough to sustain them, hence they said we do not see a reason of saving. This shows that it’s not always the case were high income earners have positive behaviors toward financial issues. The financial behavior of a person is reflected by the financial knowledge and attitude one has. showing that their level of financial literacy is low since a lot of students have a negative attitude towards saving. 38.24% have a positive attitude to saving and 51.63% are currently actively saving , students at low income levels showed positive behaviors towards financial issues, showing that their level of financial literacy is moderate. One of their reasons for having a negative attitude towards saving was because their parents always provide for them whenever they run short of money. Some even stated that they borrow because they know that their parents will double up the amount. Atkinson & Messy, (2012) in their investigation of measuring financial literacy found that attitude can be a snag to financial literacy levels.

This has seen most students not being involved in financial practices like saving, budgeting or keeping a close watch to their personal issues thereby decreasing the levels of financial behavior. Parents do have a role of training their children to some of these financial behaviors but the results of this study shows that parents might act as obstacles to financial literacy. Cull et al., (2011) in
their study stated that income act as an obstacle to financial literacy in the sense that those with low income are seen as those who are not involved in financial practices due to their low income levels. But findings of this study shows that income is not an obstacle to financial literacy but attitude to saving is. This is in line with Shults, (2012) who found saving money as an obstacle to financial literacy.

Table 4.4: Distribution of Income levels

<table>
<thead>
<tr>
<th>Income</th>
<th>Frequency</th>
<th>Percentage%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Below $150</td>
<td>240</td>
<td>65.07</td>
</tr>
<tr>
<td>Above $150</td>
<td>128</td>
<td>34.93</td>
</tr>
<tr>
<td>Total</td>
<td>368</td>
<td>100</td>
</tr>
</tbody>
</table>

*Source: Raw data*

Some of the students with income level below $150 would say we cannot save for the future because the money they have now is not adequate enough to allow them to do so. This can be because their parents are not taking their part in financial socialization and modeling a behavior to their children as they grow up. This is line with Jorgensen, (2007) who revealed that students who were financially influenced by their parents had higher financial knowledge, attitude, and behavior scores.

4.5 Level of students' of Financial Behaviour

The study assessed the level of financial behaviour on university students by examining the students’ financial knowledge, financial attitude which constitute financial behaviour as asserted by OECD, (2013) characterize the components of financial behaviour. Scores on financial behaviour combined (financial attitude and financial knowledge) were more than eighteen. All the students at fourth year had an above average financial behavior score. Less than 55% of respondents at fourth year had above average financial behavior scores and those at lower levels did showed better positive responses to behavioral questions. Since financial behavior is a function of financial knowledge and attitude, respondents at second year and first year had low knowledge and attitude scores because they still have an attitude towards managing money effectively hence they also had low financial behavioral scores.
While financial behavior seems to be significantly affected by the level of attitude one possess. In this study income levels have proved to have a bearing on how one makes decisions pertaining finances.

Table 4.5 Overall frequency of Financial Behaviour

<table>
<thead>
<tr>
<th>Financial Behaviour</th>
<th>Frequency</th>
<th>Percentage%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Students failing to budget and pay bills on time</td>
<td>189</td>
<td>51.25</td>
</tr>
<tr>
<td>Students who are able to budget and pay bills on time</td>
<td>179</td>
<td>48.75</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>368</strong></td>
<td><strong>368</strong></td>
</tr>
</tbody>
</table>

Source: Raw Data

The results in figure 4.5 above show the overall frequency of students’ ability to budget and pay bills on time. A score of zero and one was given to those who are failed to come up with a budget or pay bills on time and a score of one was given to those who were able to meet the requirements. 51.25% are failing to pay bills on time and to budget. Most of the students stated that they do not have a budget, they enjoy spending money when it’s there and currently they are not budgeting because the money they receive is not enough to sustain them, hence do not see a reason of budgeting, because it is not feasible to do so. 48.75% of the students are able to pay bills on time and put a budget in place, this is on the grounds that some students get more than enough money from their parents and in time, others also proved to have knowledge on finances on how to manage the few which they are given by their parents hence the positive financial behaviour. These results show that students’ level of financial behaviour is at moderately low which means that majority of the students in Zimbabwe are not able to pay bills on time and come up with a budget given harsh economic conditions prevailing. These results are consistent with Thapa & Nepal, (2015) who stated that students have a basic level of financial behavior.

4.6 Regression Results

A linear regression was carried out to test the significance of the relationship between financial behaviour economic and five independent variables. The following results were obtained
Table 4.6: Summarized Regression result

| Variables           | Odds Ratio | Std. Err | Z     | p>|z| |
|---------------------|------------|----------|-------|-----|
| Peerinfluence       | 1.1038     | 0.2427   | 4.49  | 0.000 |
| Parentalexposure    | 0.1524     | 0.6491   | -4.42 | 0.000 |
| Denomination        | 0.9981     | 0.0093   | -2.05 | 0.040 |
| Faculty             | 0.3342     | 0.1337   | -2.74 | 0.006 |
| Media Exposure      | 1.2054     | 0.4206   | 0.54  | 0.052 |
| Cons                | 0.2964     | 0.3587   | 1.00  | 0.315 |

Substituting the above statistics in the model stated in chapter three, the following equation comes out;

\[ FB = 0.294 + 0.1524PE + 1.1038PI + 0.3342F + 0.9981D + 1.2054ME \]

Pseudo \( R^2 = 0.5798 \)  
number of obs = 368

Prob > chi2 = 0.000  
LR chi2 (5) = 6.71

4.6.1 Interpretation of Pseudo R²

\( R^2 \) is the coefficient of determination and here 0.5798 was obtained from the estimated model meaning that about 57.98% of the variations are explained by the variables, (PARX, PEER, FAC, MEDX, and DENT). The omitted factors are the ones being accounted for in the remaining 42.02%.

4.7 Interpretation of Regression Results

All of the five independent variables were found to be statistically significant. Logistic regression estimates review that Parental exposure, Peer influence, faculty, and denomination were very significant at 5% interval level in explaining financial behaviour except media exposure. Media
exposure had the highest coefficient followed by peer influence, denomination, faculty and parental influence. An in depth analysis of the results is done below.

4.7.1 Media Exposure and Financial behaviour

Media exposure was found to be significant in the determination of financial behaviour for students’ in Zimbabwe. The results show a positive odd ratio of 1, 2054 which means that as media exposure increases, financial behaviour of a student of a student is more likely to increase as well. By analysing the study, we find that students think that the media is a medium for them to become financially literate. They no longer abide to the conventional ways of learning money management from schools; on the other hand, they trust the media (i.e., television, internet, advertisements, and newspaper) on how to spend their money. Buijzen & Valkenburg (2003), reported that 33% of college and high schools students use media or internet as a mean to seek financial knowledge, whereby it shown that the use of social media and amount of television viewed is positively related to financial behaviour and other materialistic attitudes.

4.7.2 Faculty and Financial behaviour

Faculty of the student was found to be very significant in determining financial behaviour of for students’. The results show a positive odd ratio of 0.3342 which is related to financial behaviour in a weak way as depicted by the odds ratio close to zero. Students in the faculty of commerce are more likely to depict positive financial behaviour as compared to the other four faculties who never study any finance related modules or don’t even know how to calculate interest rate. According to Varcoe, Petersen, Gabertt, Martin, and Costello (2001), information provided at college regarding economics has an important effect on the child in terms of acquiring and shaping skills, and behaviors related to consumption and financial management.

4.7.3 Peer Influence and Financial Behaviour

Peer influence is significant in determining the financial behaviour of a student and it showed a positive odd ratio of 1.1038 which means that influence from peers on a student’ financial behaviour is likely to increase financial behaviour by 1.1038. Students are more likely to listen to their peers in making financial decisions.. In a study conducted by Churchill and Moschis (1979),
it is reported that family interaction about financial management declines over age and that peer communication about financial matters increases with age. Likewise, because people want to interact with people who have similar ideas, attitudes, and knowledge, peer groups have proved to have a significant and positive role in socialization and behaviors throughout an individual’s life cycle (Moschis, 1987).

4.7.4 Parental exposure and Financial Behaviour

Results show that there is a positive relationship between parental teaching and financial behaviour with odds ratio of 0.1524. It is important to note that influence of family or parental teaching on students decreases as they grow up, students now listen to their peers more, which is explained by the low odds ratio stated above. Parental teaching has been found to be significant in determining the financial behaviour of a student. TIAA-CREF Institute’s (2001) Youth and Money Survey found that 34% of students turn to their parents for financial education. This study found this to be the case, finding that parents significantly influenced their children’s financial behaviour.

4.7.5 Denomination and Financial Behaviour

The results in the table 4.5 show that there is a significant relationship between denomination and likelihood of positive financial behaviour with an odd ratio of 0.9981. Students from denominations like Zaoga, Seventh Day Adventist, and Christ Embassy depicted positive behaviour in comparison to students from other denominations as they are taught about finances at their churches. According to Shweder (1991), religion is one of the most universal and influential social institutions and has a favorable significant influence on people’s attitudes, values, and behaviors at both the individual and societal level.

4.8 Marginal effects

Marginal effects reflect the change in the probability of financial behaviour given a unit change in an independent variable say media exposure. The following table illustrates the marginal effects on financial behaviour.

Average marginal effects
Number of obs= 368
Table 4.7: Marginal Effects Results

| Variable  | dy/dx    | Std. Err. | Z     | P>|z| |
|-----------|----------|-----------|-------|-----|
| Denomination | -0.02435 | 0.0832    | -2.93 | 0.003 |
| Faculty   | -0.0044  | 0.0021    | -2.06 | 0.039 |
| Media Exposure | 0.4284 | 0.8014    | 0.53  | 0.052 |
| peerinfluence | 0.2264 | 0.0482    | 4.70  | 0.000 |
| Parental exp | -0.4293 | 0.8787    | -4.89 | 0.000 |

Source: Raw Data

Marginal effects after logistic

\[ y = \Pr (fb) \text{ (predict)} \]

\[ = 0.644 \]

4.8.1: Marginal Effects of Peer Influence

Marginal effects of peer influence show that an increase in influence from friends and colleagues will increase the probability of paying bills on time and putting a budget in place by 22.64%. This depicts that students still rely on information from their friends and classmates in making financial decisions. Peers become increasingly important during adolescence as children begin to wean themselves from parents and become independent beings. The influence of peer groups and friendships in childhood have long been known to be important in both emotional and cognitive development (Pressley & McCormick, 2007)

4.8.2: Marginal Effects of Parental Exposure

Parental exposure marginal status results are -0.4293, which implies that the removal of guidance or teaching from parents and guardians will decrease the probability of coming up with a budget and paying bills on time among students. Parental teaching from one’s family is significant in determining the financial behaviour of university students, parents play a significant role in shaping a child’s financial habits and values (Pinto et al., 2005).
4.8.3: Marginal Effects of Media Exposure

A marginal effect of 0.4284 is shown from the results on media exposure, which implies that an increase in media exposure of an individual will increase the financial behaviour of a student in budgeting and paying bills on time by 42.84%. Koonce et al. (2008) confirmed that students learned a “good amount” or “a lot” from the media, which included television, radio, newspapers, and magazines (18.1%), and the Internet (13.5%).

4.8.4: Marginal Effects of Faculty

The results show that the marginal effect of faculty is -0.0044 which shows that an increase in financial education of a student is more likely to decrease or has minimal effect on financial behaviour of a student. The results showed that the more a student studied other programs which are not finance related the more they were less likely to come up with a budget and pay bills on time because they lacked knowledge. According to Varcoe, Petersen, Gabertt, Martin, and Costello (2001), information provided at college regarding economics has an important effect on the child in terms of acquiring and shaping skills, and behaviors related to consumption and financial management.

4.8.5 Marginal Effects of Denomination

From the results of the marginal effects, it indicates that an increased teaching of finances at various denominations of a student will also cause a decrease in the ability of budgeting and paying bills on time by 24.35%. Most Denominations rarely teach on finance hence denomination has a low influence on the financial behaviour of students. According to Shweder (1991), religion is one of the most universal and influential social institutions and has a favorable significant influence on people’s attitudes, values, and behaviors at both the individual and societal level.

4.9 Summary

Findings of the study were discussed in this chapter using excel and stata, presented in tables and figures. Descriptive statistics were also used to interpret the results of the research. Parents, lack of basic financial skills and complexity of financial concepts were seen as obstacles to some of the
low levels of financial literacy. Students with high income levels could not answer some questions which might be because their parents are not taking their part in modeling their children. Regression results showed that peer influence and media exposure have a positive relationship in explaining the financial behaviour of university students in Zimbabwe. Parental Exposure, Faculty and Denomination were observed to have a negative relationship. Therefore, socialization agents were found to be significant in determining financial behaviour. However, the model indicates that it has missing variables, however, for the sake of this study, the researcher is more concerned about the relationship of socialization agents on financial behaviour not about other variables which affect financial behaviour.

CHAPTER 5: SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

This is the final chapter to conclude the research by giving a summary of the whole research bringing up main issues in this study. The aim objective of this study was to assess the impact of socialization agents on financial behaviour of university students. It concludes the study by reviewing the findings of the study, giving recommendations and suggestions for future researches.

5.2 Summary of the Study

Financial behaviour is brought about by a number of concepts, it is a process or a culture that has to be practiced from childhood throughout one’s life. Financial behaviour is a mix of financial attitude, financial knowledge and financial literacy, which is then influenced or determined by the financial socialization agents that an individual gets in contact with and maintains throughout their life. Beutler and Dickson (2008) stated that failure to adequately socialize young people for adult financial roles is costly at both individual and societal levels. In Zimbabwe, university students’ no longer receive educational grants and loans as they used to and now rely on money from their parents. This then requires one to be able to make sound financial decisions to be able to manage their financial resources in order to survive the prevailing harsh economic condition. Socialization should be attended to earlier in life as it is in line with the social learning theory which expresses
that children’s behavior and states of mind are formed by parents who exchange standards and social values to their children.

The study employed an explanatory and descriptive research design. A descriptive design has been used so as to bring out conclusive information on the research. Explanatory research studies aim at testing hypotheses to explain the nature of certain relationships. A sample of 368 students was drawn using stratified random sampling. Faculty and denomination are one of the variables that have been recognized as snags to financial behaviour. Students do not save or budget, and plan ahead because of ignorance on how to calculate charges, interest rates or come up with a budget since they are not taking up any finance related course. Denomination had a role to play in influencing financial behaviour, however the results proved that most denominations were less likely to use church as a platform to teach finances. The study also showed that parents, basic financial skills and complexity of financial concepts are obstacles to the levels of financial literacy. It also noted that 48.75% students in Zimbabwe are able to pay bills on time and come up with a budget. The major finding of this research was that socialisation agents significantly affects the financial behaviour of student; therefore the null hypothesis is accepted.

5.3 Conclusions

The research findings gave rise to the following conclusions

- There is a positive influence of socialisation agents on the financial behaviour of University students in Zimbabwe. Therefore, the null hypothesis that socialisation agents determine financial behaviour should be accepted.
- The students’ level of financial behaviour is moderately low at 48.75% given that 41.1% of the students’ are failing to manage their finances and 35.96% of the students are failing to pay their bills on time
- Media proved to have the strongest influence on the financial behaviour of university students in Zimbabwe. Students nowadays do not abide by the conventional ways of learning money management from schools; on the other hand, they trust the media (i.e., television, internet, advertisements, and newspaper) on how to spend their money.
• Obstacles to financial literacy have been found to be the lack of skills on students and the complexity of financial services. Also attitude to save is another obstacle that has been found on financial literacy. However, parents have been found to contribute to the low levels of financial literacy on students. Parental teaching from family has an impact on the financial behaviour of students, since finances used by students are obtained from parents/family. Significance of socialisation agents on financial behaviour differs widely in terms of magnitude and direction depending on the methodology employed, sample size used, and scope of the study.

5.4 Recommendations
The research findings gave rise to the following recommendations to the students, teachers, churches, parents, media, teachers and policy makers with the idea of socialisation agents in improving the financial behaviour of students.

5.4.1. Financial Literacy Structure or Framework

There is need to include a structure for measuring, evaluating and upgrading financial literacy and financial training that is driven by a requested ordered power in the financial services division for instance, the central bank, ministry of finance, consumer council of Zimbabwe or the bankers association of Zimbabwe

5.4.2 The role of Parents and teachers

Based on our findings regarding the key role that parents play, we also believe that parents should be informed about the lessons that their own financial behaviors impart and also about the importance of direct teaching. If parents had a better understanding of how financial literacy can contribute to their children’s success later in life, they might be more inclined to demonstrate positive financial behaviors and provide or encourage financial education at home. In contrast to other life-skills, financial management is generally embedded in every facet of life and is clearly necessary to planning for the future, including for one’s college education. The same applies to teachers in all education sectors in teaching students the basics about managing money and financial concepts.
5.4.2. Establishing financial literacy programs

There is need to set up financial literacy programs in schools particularly in primary and secondary schools. Advanced education organizations in Zimbabwe should think about including a personal financial class for students from distinctive academic levels to improve their financial knowledge particularly in the ranges of borrowing. This will contribute in a productive route to the general economic development inside of the work markets students will be working in when they graduated.

5.4.3 Policy Makers

To address the ongoing barriers for low-income, minority students, policymakers must be attuned to the most relevant data, research, and knowledge regarding the challenges facing this population. Therefore, policymakers can suggest reform that meets the needs of these students. Policymakers can identify issues to focus on college affordability. They can promote policies that increase grant support for students and encourage campus practices that better educate students on their loan options.

5.4.5. Campus Administrators

Campus administrators may want to consider providing financial aid offices and additional resources for financial services and programs. They may want to offer one-on-one financial counseling and planning services. They may also develop a financial counseling clinic that operates either within or outside of the financial aid office.

5.4.6. Improving the Cadetship Scheme

In order to cater for everyone, the cadetship scheme must work like the way loans and grants used to so as to improve the wellbeing of a student in their college live.
5.5 **Suggestions for Future Research**

With the limitations brought up in this research, a few territories connected to research theme couldn't be covered thus other studies could look into on:

- The factors influencing financial behaviour of university students in Zimbabwe
- The implications of low levels of financial literacy on financial behaviour of students
- A study on the assessment of the culture of individuals towards the level of financial behaviour
- Gender differences in financial management and financial wellbeing of college students in Zimbabwe
- Financial literacy as a determinant of financial management
- How parents contributes to the level of financial behaviour and literacy of students
- A more assessment to what determines the financial literacy of Zimbabwean students
REFERENCES


Lusardi, A.&.M.O.S. (2008) 'Planning and Financial Literacy; How Do Women Fare?', *American Economic Review*.


APPENDICES

Appendix A: Questionnaire for university students

Midlands State University

P. Bag 9055 Gweru

Tel (263) 54 260432

Fax (263) 54 260442

Faculty of Commerce

Department of Banking and Finance

I am Nyota Hazel (R126302H) a final year student at the above institution studying towards completion of an honours degree in Banking and Finance. As per university requirements, I am carrying out a research entitled, “The impact of socialization agents on financial behaviour of Zimbabwean university students” I am kindly requesting for your assistance towards the cause by responding to a questionnaire. Your responses will be accorded the highest level of CONFIDENTIALITY and used ONLY for the purpose of this study.

You are advised to remain anonymous.

Thank you for your cooperation and time

Questionnaire for university students
Section A: Demographic Profile

Please indicate (/) in the appropriate information about yourself. Each question should only have ONE answer. All responses are strictly confidential.

<table>
<thead>
<tr>
<th>No</th>
<th>Questions</th>
<th>Responses</th>
<th>Coding category</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>PERSONAL INFORMATION QUESTIONS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Age</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>Gender</td>
<td>Male</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Female</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>Marital status</td>
<td>Single</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Married</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Living with partner</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Level of education</td>
<td>First year</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Second year</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Third year</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Fourth year</td>
<td>4</td>
</tr>
<tr>
<td>5</td>
<td>Monthly income (from parents, salaries etc)</td>
<td>Below $150</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Above $150</td>
<td>2</td>
</tr>
<tr>
<td>6</td>
<td>Place of residence</td>
<td>On campus</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Off campus</td>
<td>2</td>
</tr>
</tbody>
</table>
Section B: Socialization Variables

Please circle your answer to each statement using 5 Likert scale [(1) = strongly disagree; (2) = disagree; (3) = neutral; (4) = agree and (5) = strongly agree]

<table>
<thead>
<tr>
<th>PEER INFLUENCE QUESTIONS</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Strongly agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>QUESTION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>I always compare the amount of saving and spending with my friends.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>I always involve in money spending activities with friends</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>As far as I know, some of my friends draw a budget before spending</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PARENTAL INFLUENCE QUESTIONS</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Strongly agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>QUESTION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Are your parents formally employed?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>I always talk about money management with my parents</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>It’s good when my parents control my spending</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MEDIA EXPOSURE QUESTIONS</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neutral</th>
<th>Strongly agree</th>
<th>Agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>NO</td>
<td>QUESTION</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Media exposure has influenced the way you spend and budget?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Online shopping is the trend nowadays, have you ever purchased something online?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>You enjoy watching financial programs/adverts/seminars etc.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>---</td>
<td>-----------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td><strong>INFLUENCE OF FACULTY</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Courses/modules learnt at school helped you increase your financial knowledge in some way</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>Would you take a personal finance course as an elective if offered?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td><strong>INFLUENCE OF DENOMINATION</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Which church do you go to?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2</td>
<td>You sometimes taught about finances at your church?</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Section C: Dependent Variable

FINANCIAL BEHAVIOR
a. Some people tend to be very thrifty, saving money whenever they have the chance while others are spending-oriented, buying whenever they can and even borrowing to consume more. How would you classify yourself?
0. Very thrifty, saving money whenever I can
1. Very spending-oriented, hardly ever saving money

b. What kind of financial accounts do you have? (Check all that apply)
Savings, current account, smart cash account, student account mutual funds IRA other:

c. Have you ever used any of these products?
Internet Banking, Mobile banking, Credit/Debit cards, ATMS

d. How do you usually pay your monthly bills?
0. I pay the minimum
1. I pay bills in full

e. In what manner do you maintain financial records?
0. Maintain no records
1. Maintain minimal records

Rate the following items TRUE/ FALSE

a. I budget and track spending.
   True/ False

b. I compare my receipts of purchases to my monthly statement.
   True/False

c. I have my parents "bail me out" debt.
   True/False

d. If you have used a financial product in the past year months. Did you compare the same product or service with those of other banks?
   True/False
e. Are you currently actively saving?
True/False

f. Do you borrow to make ends meet if you run short of money?
True/False

g. Do you keep a close watch on your personal financial issues?
True/False

FINACIAL KNOWLEDGE AND FINANCIAL ATTITUDE QUESTIONS

<table>
<thead>
<tr>
<th>FINANCIAL KNOWLEDGE QUESTIONS</th>
</tr>
</thead>
<tbody>
<tr>
<td>7 If fifteen people were given $1500 to share equally. How much does each one get? (indicate response)</td>
</tr>
<tr>
<td>8 If you save $1500 for a year and the inflation rate is zero. How much would you have now?</td>
</tr>
<tr>
<td>9 After lending $500 to a friend, she pays you back $510. How much interest has she paid you? (indicate response)</td>
</tr>
<tr>
<td>10 Suppose that you deposit $100 in a savings account with a fixed 2% per year interest rate. How much would be in the account after a year? (indicate response)</td>
</tr>
<tr>
<td>11 And how much would be in the account after 5 years?</td>
</tr>
<tr>
<td>Question</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>An investment with high return offers high risk</td>
</tr>
<tr>
<td>High inflation means high costs of living</td>
</tr>
<tr>
<td>Money is there to be spent</td>
</tr>
<tr>
<td>You live for today and let tomorrow take care of itself</td>
</tr>
<tr>
<td>You find it more satisfying to spend money than to save it for the future</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
### Appendix B: Regression results

Logistic regression  Number of obs = 368  
LR chi2(5) = 67.71  
Prob > chi2 = 0.0000  
Log likelihood = -87.159012  Pseudo R2 = 0.5798

|     | Odds Ratio | Std. Err. | z    | P>|z| | 95% Conf. Interval |
|-----|------------|-----------|------|------|-------------------|
| fb  | 1.103784   | 0.0242664 | 4.49 | 0.000 | 1.057233 1.152385 |
| pi  | .1523501   | .064907   | -4.42| 0.000 | .0660995 .3511457 |
| pe  | .3341613   | .1336765  | -2.74| 0.006 | .1525615 .7319262 |
| f   | .9980823   | .0009327  | -2.05| 0.040 | .9962558 .9999121 |
| d   | 1.205439   | .4206193  | 0.54 | 0.542 | .6083194 2.388685 |
| me  | .2963579   | .3586866  | -1.00| 0.315 | .0276436 3.177159 |

_xx_
Appendix c: Tests

. corr financialbehaviour peerinfluence parentalexposure mediaexposure faculty
> denomination
(obs=367)

<table>
<thead>
<tr>
<th></th>
<th>financ~r</th>
<th>peerin~e</th>
<th>paren~e</th>
<th>mediaex~e</th>
<th>faculty</th>
<th>denomi~n</th>
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<td>0.0139</td>
<td>-0.1017</td>
<td>-0.0092</td>
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. hettest

Breusch-Pagan / Cook-Weisberg test for heteroskedasticity
Ho: Constant variance
Variables: fitted values of financialbehaviour

chi2(1)      =     0.19
Prob > chi2   =   0.6618

alpha parentalex peerinf mediaex facult denom

Test scale = mean(unstandardized items)

Average interitem covariance: 1.775118

Number of items in the scale: 4

Scale reliability coefficient: 0.6152
APPENDIX D

ODDS RATIO

logistic fb pi pe f d me
Logistic regression Number of obs = 368
LR chi2(5) = 67.71
Prob > chi2 = 0.0000
Log likelihood = -87.159012 Pseudo R2 = 0.5798

|     | Odds Ratio  | Std. Err. | z     | P>|z|  | 95% Conf. Interval |
|-----|-------------|-----------|-------|------|-------------------|
| pc  |             |           |       |      |                   |
| pi  | 1.103784    | 0.0242664 | 4.49  | 0.000| 1.057233 1.152385 |
| pe  | 0.1523501   | 0.064907  | -4.42 | 0.000| 0.066095 0.3511457|
| f   | 0.3341613    | 0.1336765 | -2.74 | 0.006| 0.1525615 0.7319262|
| d   | 0.9980823    | 0.0009327 | -2.05 | 0.040| 0.9962558 0.9999121|
| me  | 1.1205439    | 0.4206193 | 0.54  | 0.052| 0.6083194 2.388685 |
| cons| 0.2963579    | 0.3586866 | -1.00 | 0.315| 0.0276436 3.177159 |

MARGINAL EFFECTS

mfx

Marginal effects after logit
y = Pr(fb) (predict)
= .64401636

|     | dy/dx      | Std. Err. | z     | P>|z|  | 95% Conf. Interval |
|-----|------------|-----------|-------|------|-------------------|
| pi  | 0.226381   | 0.00482   | 4.70  | 0.000| .013197 .355922   |
| pe  | -0.429292  | 0.08787   | -4.89 | 0.000| -.601517 -.357542 |
| f   | -0.245144  | 0.08324   | -2.93 | 0.003| -.406663 -.341899 |
| d   | -0.0004401 | 0.00021   | -2.06 | 0.039| -.000858 -.00022  |
| me  | 0.0428357  | 0.08014   | 0.53  | 0.52 | -.114227 .199899  |
| cons| 0.32079    | 0.03278   | 10.00 | 0.000| .260956 3.38064   |

(*) dy/dx is for discrete change of dummy variable from 0 to 1
APPENDIX E: DESCRIPTIVE STATISTICS

sum age gender educationlevel income placeofresidence

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<th>Variable</th>
<th>Obs</th>
<th>Mean</th>
<th>Std. Dev.</th>
<th>Min</th>
<th>Max</th>
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<td>2.05</td>
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<td>8</td>
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Total | 368  100.00

tab financialattitude

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xxiii
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<td>21.92%</td>
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Total | 368   | 100.00% |

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tab income

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<td>Above $150</td>
<td>128</td>
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</table>

Total | 368   | 100.00% |

tab fb

<table>
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<td>53.77%</td>
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<td>1</td>
<td>170</td>
<td>46.23%</td>
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Total | 368   | 100.00% |