# SOCIO-ECONOMIC FACTORS INFLUENCING FINANCIAL LITERACY AMONG UNIVERSITY STUDENTS IN KENYA: AN EMPIRICAL APPROACH

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# RESEARCH PROPOSAL SUBMITTED IN PARTIAL FULFILMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF MASTER OF SCIENCE IN COMMERCE-FINANCE AND ECONOMICS- KCA UNIVERSITY

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# DECLARATION

This research proposal is my original work and has not been presented in any institution of learning for an award of any kind.

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# **SUPERVISOR**

This research proposal has been submitted for examination with my approval as the University supervisor.

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#### ABSTRACT

Most students exercise financial independence after they enrol in a university. That is when their parents or guardians allow them to make their own financial decisions. As many of the University scholars reside away from home; they are left with financial decisions to make which depends on the individual's financial literacy (knowledge). Financial literacy can be defined as an individual's capability to make informed choices concerning financial planning, arrears, pensions and ways of accumulating wealth. The chief purpose of this study is to look at the socioeconomic factors influencing financial literacy in the midst of scholars in Kenya with special focus to University of Nairobisinceit has a high population of students with a wide diversity concerning background (both self and government sponsored) and the variety of courses taken. The specific objectives include; evaluating the effect of students' financial experience on financial literacy amidst Kenyan university students; to investigate the consequence of students' financial training on financial literacy among the students in Kenya; to explore the effect of students' economic condition on financial literacy among them; as well as to investigate the influence of student's family characteristics on financial literacy among university students in Kenya. Learning Theories, Keynesian Theory of Income and Behavioural Financial Theory have been employed to study university students' financial literacy. This study will employ descriptive survey design; the design is the most appropriate for the empirical approach employed in this study. This research study will use stratified sampling to identify a model of 383 from the university's student population.Data will be collected through self-administered questionnaire and later examined using descriptive statistics and regression analysis. The obtained results will be presented in the form of graphs and tables. Finally, conclusions and recommendations will be offered based on the outcome of the study.

Key Words: Financial Literacy, Financial Experience, Financial Training, Economic conditions, Family characteristics, Personal income, Personal Characteristics,

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## ABBREVIATIONS AND ACRONYMS

- **ELT** Experiential learning theory (ELT)
- EFEP European Financial Education Partnership
- **OECD** Organisation for Economic Co-Operation and Development
- **SEDI** Social and Enterprise Development Innovations (SEDI)
- SPSS Statistical Package for Social Sciences
- **STEM** Science, technology, engineering, and mathematics

## **OPERATIONAL DEFINITION OF TERMS**

- **Economic conditions:** Status of the financial position of an individual at a specific period (Wachira&Kihiu, 2012).
- **Family Characteristics:** Attributes in an individual's family that may impact his/her financial literacy (Holzmann, 2010)
- **Financial experience:** Expertise regarding core financial instruments obtained from an individual's financial undertakings (Njoroge, 2013).
- **Financial Training**: Actions, courses to improve the skills of individuals towards financial understanding (Widdowson&Hailwood, 2011).
- **Financial literacy**: An Individual's capability to understand economic data hence make informed choices on financial planning, arrears, pensions and ways of accumulating wealth. (Lusardi&Mitchelle 2014). According to Xu and Zia (2012), financial literacy is used interchangeably with financial knowledge and financial proficiency.
- **Personal characteristics:** Unique traits in an individual such as gender, age, year of study or any other attribute that may influence financial behaviour (Kefela, 2011).
- **Personal Income:** The total of a person's income in a certain period, for example, pay or wages, benefits acknowledged from business undertakings that may affect their financial knowledge(Potrich, Vieira, & Mendes-Da-Silva, 2016)

#### **CHAPTER ONE: INTRODUCTION**

#### 1.1 Background of the Study

Financial literacy can be defined as an individual capability to understand economic data hence make informed choices on financial planning, arrears, pensions, and ways of accumulating wealth (Lusardi&Mitchell, 2014). Researchers use financial literacy interchangeably with financial knowledge and financial proficiency (Fessler, Schurz, Wagner &Webe, 2011; Xu, and Zia, 2012; Wise, 2013; Thaler, 2013). The Organisation for Economic Co-operation and Development (2013)conceptualizes financial knowledge as a blend of mindfulness, information and abilities required for settling on financial choices and at last accomplishing individual budgetary prosperity. In the perspective of Criddle (2010), being financially literate is critical for people to settle on sound financial choices, both for the time being and the long haul.

Many surveys have been done in the U.K. (Atkinson, McKay, Collard &Kempson, 2011); Austria (Fessler, Schurz, Wagner &Webe, 2011); Poland (Szafranska&Matysik-Pejas, 2010); Fiji (Sibley, 2010); and Ireland (O'Donnell & Keeney, 2009). Discoveries from these reviews, for the most part, support the low level of financial knowledge on a global level. A portion of the discoveries from the latest Fin Scope studies (2015) in 14 nations by large extent show low levels of financial literacy. For example, in Ghana, one of the higher-pay nations, just 56 % of grown-ups utilize any financial item and tumbles to 22 % in Mozambique.

Studies done in Kenya have shown that Kenyan students lag low in financial literacy regardless of the hard work put to increase the levels of financial knowledge by the administration and the stakeholders (Wachira&Kihiu, 2012; Njoroge, 2013). The Kenyan administration while addressing this crisis said "education and training in Kenya today is facing various challenges that have negatively impacted on its economic development. Unless addressed immediately, these challenges are likely to affect the current and future development in Kenyaunfavourably "(Ministry of Education Science & Technology, 2010).Discoveries from Fin Access national review (2009) uncovered that 60 for each penny of the grown-up populace in Kenya need formal financial training. It is along these lines that it can be presumed that financialliteracy is a noteworthy test confronted by all nations all inclusive. Various reviews have reliably shown that

financial literacy levels are low (KojoOseifuah, 2010; Kefela, 2011; Xu, and Zia, 2012; Wise, 2013).

According to Mahdzan and Tabiani (2013),expanding financialknowledge advances better leadership in this way; empowering better arranging and administration of life occasions. It also helps improve financial sustainability which will eventually lead to increased rate of economic growth and development. It is likewise likely that undergrads are encountering challenges with funds, for example, paying bills, planning month to month costs, and overseeing obligations. How well they adapt to these difficulties relies upon the financial learning they gained preceding getting into school (Atkinson and Messy, 2012). Past research over the globe have demonstrated that university students are insufficiently prepared for these new weights and that they regularly and ineffectively deal with their funds (Xu, and Zia, 2012; Wise, 2013; Thaler, 2013). Siekei, Wagoki and Kalio (2013) distinguish the significance of students getting to be noticeably proficient about financial literacy is progressively being perceived by colleges.

While most of the previous studies identify lack of financial literacy as a problem, mainly in the developing countries, few accord sufficient details to the influencing factors. On the same note, few studies have employed an empirical approach to investigate specific factors, creating the need for further research. In this light, this study seeks to analyse the socio-economic factors influencing financial literacy among scholars in Kenya using an empirical approach.

# **1.1.1** Concept of Financial Literacy

Kezar and Yang (2010) identify financial literacy as 'an important factor of a college degree. It is imperative that university students are taught on the most proficient method to use cash they will acquire at a later phase of life and where else to instruct them if not in school. According to the US National Jumpstart Coalition review in 2010, university students who studied individual fund course were ready to improve the situation on the national institutionalized financial proficiency test than the individuals who did not go to those courses. Because these tasks were then made in developed nations, Kenya should likewise take the jump to give financial courses to their university students in order to appreciate the benefits of having a financially educated youthful era (Wachira and Kihiu, 2012).

Coherently there is the contention that individual fund ought to be a piece of essential training of all students (Mandell, 2009), and most developed countries have received or intend to order financial instruction as a major aspect of the kindergarten-year 12 educational modules (OECD, 2012). Extra research that has concentrated on youth and financialliteracy training has likewise given proof that formal courses in individualscan increasefinancial knowledge, and frequently result in more positive financial conduct (Kefela, 2011; Siekei, Wagoki, &Kalio; 2013, Njoroge, 2013).

Financial literacy has some advantages for the university students such as increased savings, increase in investments and choosing right products with confidence (Holzmann, 2010). Additionally, Xu & Zia, (2012) identified that undergraduates who are more economically literate can save for retirement. This can be accomplished by setting aside money and selecting suitable investments for the future. For instance, an informed student will spare some money for the future, for retirement and unexpected conditions including emergencies (Chung-Sook, Kyungyoung&Chul, 2014).

#### **1.1.2 Factors affecting financial Literacy.**

The factors that affect students' financial literacy are mainly classified into two categories which are; the internal and external factors. Internal factors are the personal traits in individuals that shape the way people spend and save. Joo and Grable (2014) discovered that individuals who are successful in financial management tend to have strong positive financial attitudes.

External factors are forces from outside your environment that influence one to behave in a certain way. External factors consist of social-economic influences such as financial experience (Mandell 2011); financial training (Peng, et al. 2011); economic conditions (Worthington 2010); andpersonal traits (Lusardi, Mitchell &Curto, 2010). Monticoneet al., (2010) further identify geographical conditions and family attributes as also external factors. In a study done by Kim (2011) showed that 33% of university and high schools scholars apply unreliable sources such as social media or the web as a means to search for financial information which is an external factor. This study will focus on the influence of socio-economic factors on financial literacy on university students.

#### **1.1.3 University Students**

As of late, financial literacy among students in universities has picked up more progressively in connection to unfavorable budgetary practices (Kefela, 2011). According to Kojo, (2010), the most financially aversive behaviours include; impulse buying, extravagant living, and arrears with no savings. The increasing expenses of advanced education combined with reducing income have additionally prompted inquiry of expanded attention to financial literacy (Shambare and Rugimbana, 2012). For most youthful grown-ups, school denotes the start of more noteworthy autonomy and moral obligation. For some students, it is the first occasion when they are presented to complex frameworks and procedures, for example, scholastic planning and economic guidelines (Murphy and Hicks, 2006).

A students understanding of financial conceptsis vital in deciding how well they will oversee cash, react to or defeat economic snags. Tierney, Corwin, and Colyar (2005) propose that undergraduates from low-pay foundation commonly grow up with less access to financial information than their higher pay peers. At a certain point amid their school life, students can and regularly encounter times of economic anxiety. For example, for low-pay undergraduates, the anxiety related to funds has been observed to be confused by their encounters and conditions which can additionally influence different parts of their academic life (Shambare and Rugimbana, 2012; Chung-Sook, Kyungyoung and Chul, 2014).

Previous studies have mostly focused on employees rather than students. On the other hand, focusing on students at an early stage will try to curb this problem at an early stage rather than waiting for it to trickle down to later stages in life. It is against this background that the current study endeavors to investigate the effect of socio-economic factors on financial literacy among students in Kenya.

## **1.2 Statement of the Problem**

Financial literacy is a global concern and therefore significant to the global research community. A study by Chung-Sook, Kyungyoung, and Chul, (2014) revealed that most of the university students enter collegewithout adequate financial knowledge.Therefore, their wrong financial choices frequently result in a lot of issues far beyond poor scholastic execution.They range from

social repercussions such as being drug addicts while trying to cope with the economical strain and adverse economic effects by using their funds inappropriately (Kim, 2011).

As of late, the quantity of colleges in Kenya has expanded which has brought about a huge increment in the quantity of scholars. A large portion of them make the most of their first experience of financial autonomy amid their college life and this implies they are dependable in their own economic behaviour. Since a large portion of the Universities students live far from their relatives, they settle on their own budgetary choice on whether to save, spend or invest in view of their financial information. The issue today is that they have had more cash to spend than the students in past eras, however they have appeared to have low levels of financialliteracy and to be imprudent purchasers (Lusardi and Mitchell, 2011; Atkinson and Messy, 2012). Along these lines, college scholars have turned out to be one of the essential target client showcases (Shambare and Rugimbana, 2012). As Mbarire and Ali, (2014) report, Kenya has low levels of financial literacy and this is additionally upheld by the negligible level of the general public information on things like sparing, investing and planning.

Prior studies on university students have been done on international students and they reliably find that they are not getting a decent training in individual financial essentials and have poor information which limit their ability to make informed decisions (see Lusardi& Mitchell, 2011); Atkinson and Messy, (2012); Albeerdy and Gharleghi (2015). Following their research, Lusardi and Mitchell (2014) came to a conclusion that students are not informed about individual finance while Albeerdy and Gharleghi (2015) showed low levels of financial literacy among College scholars. In the Kenyan context, Mbarire and Ali (2014) recorded low financial literacy levels amongst the workers of Kenya Ports Authority.Previous studies in Kenyan context have mostly focused on employees rather than students. On the other hand, focusing on students at an early stage will try to curb this problem at an early stage rather than waiting on it to trickle down to later stages in life.Therefore, there is need for an empirical study targeting university students in the Kenyan context. The chief aim of this study therefore is to evaluate the socioeconomic factors influencing financial literacy among college scholars in Kenya with special focus in the University of Nairobisinceit has a high population of students who are diverse in terms of background and courses undertaken.

# **1.3 Research Objectives**

# **1.3.1 General Objective**

The general objective of this study is to establish the socio-economic factors influencing financial literacy among university students in Kenya.

# **1.3.2 Specific Objectives**

- i. To examine the effect of students' financial experience on financial literacy among university students in Kenya.
- ii. To establish the effect of students' financial training on financial literacy among university students in Kenya
- To explore the effect of the economic condition on financial literacy among university students in Kenya
- iv. To investigate the effect of student's family characteristics on financial literacy among university students in Kenya
- v. To identify the controlling effect of student's personal characteristics on financial literacy among university students in Kenya
- vi. To examine the moderating effect of personal income on other factors influencing financial literacy among university students in Kenya

# **1.4 Research Questions**

- i. What is the effect of students' financial experience among university students in Kenya?
- ii. To what extent does students' financial training affect financial literacy among university students in Kenya?
- iii. What is the effect of the economic condition on financial literacy among university students in Kenya?
- iv. How does the family characteristic of university students in Kenya affect their financial literacy?
- v. What is the controlling effect of personal characteristics on financial literacy among university students in Kenya?
- vi. How does personal income moderate the other factors influencing financial literacy among university students in Kenya

## 1.5 Significance of the Study

One segment of the societywho will be driving forward the state economy is university students. Individual financialknowledge is relied upon to be one of the fundamental capital back. Butupto this point the financial instruction students get in school concentrates on giving them just employment. They lack the financial knowledge that will be helpful when they complete school, work, and acquire pay for investments. In such manner, the present investigation will be huge in the following ways:

i). This study will be profitable to the university students. University students require this data while starting their advanced education encounters, since they may have their first involvement with settling on huge economic choices.

ii). The study will likewise be valuable to the university's administration since it will enable the advancement and execution of various instructive projects meant for expanding financial knowledge. University students must be sharpened such that they get legitimate training towards financial administration with the end goal for them to get a grip on their spending practices and propensities for what's to come. Instructive foundations ought to legitimately shape university students with the goal that they can adjust and get by in this present reality.

iii). This study has an additional objective to clear up the financial elements that impact financial literacy levels so future analysts and professionals can utilize the data to recognize and help university students at different financial education levels. With the expanded enthusiasm for the financial literacy levels of university students, this investigation will add to the collection of learning and exploring on college students by giving a reference point to future scientists.

# 1.6 Scope of the Study

The study will focus on the socio-economic factors influencing financial literacy among university students in Kenya. This study will be based in University of Nairobi. The study will consider departments in the University where primary data will be collected from the students.

# **1.7 Limitations/Assumptions of the study**

Although the researcher has carefully planned for the study, it is significant to understand that the study suffers the subsequent limitation:

• The study assumes that the socio-economic factors influencing financial literacy among students in University of Nairobi are the same across universities in Kenya, which may not entirely be the case.

# CHAPTER TWO LITERATURE REVIEW

#### **2.1 Introduction**

This chapterincludes an orderly presentation of earlier works related to the variable under investigation. A review of the existing literature makes it feasible for the researcher to come up with a broad investigation. It also includes assessment of any officially existing writing identified to recognize gaps in the past investigations.

#### **2.2 Theoretical Review**

This section discusses theories and models on which the study is anchored.

## 2.2.1 Experiential Learning Theory

This study is based on the Experiential learning theory theorized by David Kolb in 1979. Nazarova (2007) states that as theorized by Kolb, experiential learning theory considers figuring out the procedure where information is created through the grasping and transforming of experiences."Sebstad and Morcos (2011) suggest that experiential learning theory (ELT) assumes that experience plays a central role in thelearning procedure and grown-up improvement, both of which are steady with how individuals learn, develop, and grow along these lines making it significant to this experience.

The logic of this theory is that university students do not only learn from the activities of the classroom seminars, but also acquire knowledge from their real life situations thus makes it ideal to base this study. The theory is also ideal for understanding student's financial experience because it prospects learning as "the process whereby knowledge is created through the transformation of experience and from the combination of grasping and transforming experience" (Nazarova, 2007).Therefore, University students required to learn by reflecting on their previous financial experience.

#### 2.2.2Social Learning Theory

Social learning theory outlines how social elements impact in forming a man's conduct. The financial dispositions and qualities individuals have about cash originate from their condition.

The impacts of social collaborations have been demonstrated, tried and connected to a wide assortment of circumstances (Glaeser and Scheinkman, 2011). Social cooperation may influence economic choices as individuals get and process data through connecting with others.

Social learning theory clarifies how individuals learn conduct by watching that of others'. If people watch useful results coming about because of a specific conduct, they will probably copy that conduct; on the off chance that they watch antagonistic results they are less inclined to do as such. Social Learning Theory has been connected to an assortment of themes including impulsive behaviour (Fabien and Joliceour, 2013) andfinancial conduct. This theory clarifies how people learn conduct (Cude et al., 2010). This theory is pertinent to this study since it shows impacts amongst individual and family foundation factors ie; (students living arrangement, and parent's education) and financial prosperity. This gives a ground to comprehend college students' socio-economicfactors in connection to financialliteracy.

## 2.2.3 The Keynesian Theory of Income.

The Keynesian Theory of Income explains that a raise in income leads to an increment in the aggregate demand in an economy implying that if individuals have increased incomes, they will constantly consume and at the same time invest more (Kaldor, 2015).According to this theory, individuals will seek ways to invest their saving in company securities or other financial products thus leading to enhanced financial literacy(Lusardi& Mitchell, 2014). Moreover, the need to invest will drive individuals to seek ways improve their financial/economic condition as well boost their family's incomes. Notably, Charles, Dalleryand Marie (2015) explains that an individual with increasing income can be able to change their environment and move to new neighbourhoods where they can interact with people who are more knowledgeable when it comes to finances making one more financially literate.

The Keynesian Theory of Income is relevant to this study as it explains the role of economic condition, family characteristics and personal income on financial literacy. Individuals with higher incomes or whose family income is considerably higher will seek ways of investing which will open up doors of obtaining financial knowledge. Besides, the level of income of a student may determine the people with whom they associate, which may make a student become (or fail to get) financially literate. On the same note, students from low-income settings may seek ways

to manage the little resources at their disposal so that they can meet their needs, which would lead them towards financial literacy.

## 2.2.4 The Behavioural Finance Theory.

The Behavioural Finance Theory draws from behaviourist theories in psychology to explain financial decisions across several platforms. Wong (2017) asserts that this theory offers a basis to explain the financial behaviour of individuals, particularly why the majority of the people take the investment decisions they tend to take today. Additionally, the theory explains why an individual would realize their need for financial literacy thus make an effort to obtain financial knowledge through training or experience, which in turn results in a change in their financial behaviour (Hirshleifer, 2015). The theory stresses that the process of seeking information about investment opportunities with the aim of making rational investment decisions is what brings about the desire to acquire financial literacy in many individuals (Garcia, 2013).

This theory finds use in this study as it will offer a foundation to relate the financial behaviour of individuals to their financial literacy. The theory is, thus ideal to unmask the personal characteristics that my influence the financial literacy of an individual. For instance, it will explain why an individual may seek information about investment opportunities to improve their economic conditions, the social welfare of their families and acquire financial security. Regarding financial experience and economic conditions, the theory explains why university students may work to improve their economic conditions through controlled spending, savings, and investment to take advantage of business opportunities, which is an indicator of financial literacy.

## **2.3 Empirical Review**

Various scholastic investigations have found the significance of financialliteracy for different parts of family unit's prosperity and financial steadiness. Jorgensen (2011) researched the individual financial literacy of an example of undergrad and graduate university students utilizing the individual qualities of sexual orientation, class rank, and financial status, and analysed parental and companion effects on the level of financial proficiency of university students. It discovered low scores among university students in financial literacy, state of mind, and conduct however essentially expanding every year. Lusardi et al. (2010) analysedfinancial proficiency among the adolescent in Germany and demonstrated that financial education is low;

just short of what 33% of youthful grown-ups were found with fundamental information about loan costs, inflation and risk mitigation.

Nidar and Bestari (2012) examined the level and factors affecting the individual financial literacy of 400 university students in Padjadjaran University of Indonesia and found that level of individual financial proficiency was of the low category, particularly in investments, credit and insurance.

## 2.3.1Financial experience and Financial Literacy

Vitt,Kent, Lyter, Siegenthaler and Ward (2010) defined financial literacy as the capability to read,assess, oversee the individual financial conditions that influence material prosperity. Among the socio-economic factors that influence financial literacy is the student's financial experience. The financial experience of a college student may be determined by whether the student: may be having a bank account (Mahfudh, 2014); owns a business(Mahdzan&Tabiani, 2013); or has invested in financial securities (Kidwell, & Robert, 2014).

A student with a bank account is likely to practice financial discipline since they will make withdrawals at specific times of the day (Mahfudh, 2014). This study explains that the student with a bank account may be more financially literatethan the one who may not be having an account. Mahdzan and Tabiani, (2013) found that a student who owns a business is likely to be more enlightened on financial matters as opposed to one without. The rationale behind the literacy is that the daily experience of managing the finances of the business equips one with a range of insights and aptitudes regarding finance. According to Kidwell and Robert, (2014)a student who invests in company securities becomes financially literate since he/she is likely to attend company meetings where financial matters are discussed. According to their study, the student becomes more knowledgeable in matters of finance opposed to another one who may not have invested in securities.

## 2.3.2Financial Training and Financial Literacy

Financial training is another crucial factor impacting financial literacy. Social and Enterprise Development Innovations (SEDI) view financial training as three dimensional develop that incorporates financial learning and understanding, financial abilities and competency. Financial

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training looks at the type of degree pursed, financial training/conferences attended and interest on financial programs in social media. For instance, Murphy (2012) found thatundergrad business majors were more monetarily educated than non-business majors. The Jumpstart College Survey (Mandell, 2008) likewise found that financial proficiency was straightforwardly identified with guardians' instruction levels. Careful management of the little resources in university student is critical in their endeavour to meet their day to day needs and take advantages of the opportunities when they come along in their life school. Thus, taking advantage of the available financial resources to maximize university student financial potential is a key concern of the financial training curriculum that seeks to transform the life and livelihood through the transformation of their financial management behaviour.Friedman (2005) asserts thatsettling on viable budgetary choice, knowing how to oversee cash are basics to getting a charge out of a safe financial future because numerous people have not learnt the importanceof settling on sound financial decisions. Along these lines, entrance to financial education programs is a squeezing need in our universities, for example, college students who are changing from dependency.

#### 2.3.3 EconomicConditionsand Financial Literacy

The economic condition of a student may be determined by several factors among them family income, the perception of the available business opportunities and taxation (Lusardi et al., 2010); (Beal&Delpachitra, 2011; Kezar, & Yang, 2011). Lusardi et al. (2010) identified that the level of income in a family influences the financial decisions made by the family members. Cole et al. (2008)clarify that individuals in Indonesia who claim endeavours will probably be financially educated. When a student has business opportunities he is willing to pursue, he or she is likely to seek financial advice from financial experts or print media to enable him to invest wisely making him or her enlightened in matters of finance. The financial position of a student may be as well be affected by the fact that the student may be paying taxes or not (Kidwell, & Robert, 2014). For instance, if a student is paying taxes, he will be more financially literate since, in the process of making returns, they learn more about finances such as how to calculate taxes.

## **2.3.4Family Characteristicsand Financial Literacy**

This discussion will identify with how family qualities have an impact on financial literacy among students. This might be dictated by the education level of the leader of the family, geographical location, and family size (Beutler & Dickson, 2008; Glaeser and Scheinkman, 2011; Moschis, 2010). In a research led by Glaeser and Scheinkman (2011), it is accounted for thatfamily discussions about financialmatters decays over age and that companion correspondence about financial issues increments with age. In various research works family attributes have been observed to be having an association with the level of financial education. Guardians impact their kids through direct instructing, support and purposive displaying (Moschis, 2010). This is to demonstrate that family, particularly parents hugely affect the financial literacy of an individual (Glaeser and Scheinkman 2011). The level of education towards the finances of a parent will naturally be instilled to their kids, and the youngsters will attempt and respond this conduct. The geographical area of the family (rural or urban) affects financial education since kids learn financial administration conduct through perceptions and support, otherwise called incidental learning (Moschis, 2010). As per Danes & Hira, (2013), they can likewise learn through deliberate direction by socialization agents. If guardians are sufficiently capable of teaching their economic behaviour to their kids, they will be monetarily educated even before going to class for programs related to financial literacy.

#### **2.3.5** Personal characteristics and financial literacy

While the above factors influence financial literacy, the personal characteristics such as age, gender and year of study are internal factorsthat cannot be overlooked as Bryman, and Cramer, (2011) explain, stand as control variables. Age has been portrayed in a few examines as a determinant of financial literacy; In Australia Worthinton (2004) and in Sweden, Almenberg and Säve-Söderbergh (2011) clarified the connection between financial proficiency and age utilizing a curve, the curve indicated financial literacy at various ages of a person. The curve was at its top at around 35 years and most reduced at 65 years. On a comparable note, Lusardi and Mitchell (2010) noticed a five per cent better execution on financial proficiency test scores with prime age gathering (25-65) than those under 25 or more than 65 years of age. With respect to year of study, as an undergrad continuously moves starting with one year then onto the next so is

financial learning set to increment demonstrating larger amounts of financial literacy as the years advance.

In some research works, gender relates significantly with the level of financial literacy. As indicated by Guiso and Jappelli (2008) being male is related to be more noteworthy financial literate in Italy. Besides, Bernhein (2009) demonstrated that guys perform better on financial inquiries. In a comparable vein, Goldsmith (2010) called attention to that ladies score more awful than men because by and large extent, they are less intrigued by the points of speculation and individual fund. Past research has ordinarily discovered that male students had larger amounts of financial proficiency than their female partners (Chen and Volpe, 2009). Nevertheless, there is additionally an alternate finding in which Ibrahim et al. (2009) discovered that there is no distinction between the level of financial information amongst male and female students.

#### **2.3.6 Personal Income and Financial literacy**

Personal income is significant in financial literacy as a moderating variable. According to Bryman and Cramer (2011), moderating variablescooperate with the independent factors either to limit or upgrade the connection between the autonomous and dependent factors. In this regard, the connection amongst dependent and autonomous factors is an element of mediator variable. Financialliteracy scores have likewise been observed to be by large extent connected with individual wage levels (Jorgensen, 2011; Beal, &Delpachitra, 2011). Higher financialliteracy scores are probably going to be shown by people with more elevated amounts of individual wage and lower scores by those with less salary (ANZ, 2008). A student with a constant income either from salaries, personal investments, government agencies or guardians will have more knowledge about financial management as opposed to one who gets money on the occasional basis.Notwithstanding that, Traut-Mattausch& Jonas (2011) found that the connection between financial education levels and savings is directed by the wage levels. They found that pay levels have a positive relationship with savings behaviour.

#### 2.4 Summary of Literatureand Research Gaps

An analysis and review of past studies reveal that little research has been done with a specific focus on socio-economic factors influencing financial literacy among university students in Kenya. The few studies done on financial literacy targeting university students is on international

students and have revealed that students with high financial experience are also financially literate, though the extent of the effect is not clear. On a similar note students with the business major are more financially educated than other majors since they only use dichotomous variables yet it is important to do comparisons against several disciplines as well as different faculties. Moreover, fewer endeavours have been made to look at financial proficiency levels of students from various departments. There is, also, the need to investigate the effect of financial conditions and family characteristics on financial literacy.

Based on above discussion, the current study identified a considerable research gap in previous research works.In a nutshell, none of the studies that were identified focussed on financial literacy among university students in Kenya (see appendix I). Attaining financial literacy as astudent enhances one's financial decision throughout their life.Notably, past studies on factors influencing financial literacy in Kenya do not focus on university students but other institutions. For instance, Mbairire(2014) focused on employees in KRA. Mahfudg, (2014) focused on investors' financial literacy in the NSE, Onyango, (2013) focussed on employees of Commercial Banks in Kenya, and Kariuki, (2009) focused on micro-financeinstitutions inEmbuCounty.The present investigation endeavours to fill this hole by concentrating on the components affecting financialliteracy among college scholars in Kenya with a focus on the University of Nairobi.

#### **2.5 Conceptual Framework**

In this study, the conceptual framework will look at the socio-economic factors influencing financial literacy among university students in Kenya with a focus on the University of Nairobi.

The conceptual framework is a diagrammatic introduction of the connection amongst dependent and independent factors (Mugenda and Mugenda, 2003). In this investigation, the dependent variable is financial literacy levels while the independent factors are the determinants of financialliteracy, i.e., financial experience, financial training, economic condition and family characteristics. The controlling variable is personal characteristics while personal income is the moderating variable (see Fig.1 below).

Independent Variables			
Financial Experience	Dependent Variable		
• Having a bank account			
• Owns a business,	odical study of the observable influences of behaviour		
• Has invested in financial	(Goldhaber, 2000). Pavlov, a founding behaviourist,		
securities	$\rightarrow$		
	be learned, modified, and extinguished by altering the		
conditions immediately in which	the behaviour occurs (Sebstad&Morcos, 2011).		
Financial Training			
• The type of degree pursued	financial literacy can be learned and hence support		
Financial conferences	refore through this theory gives a better understanding		
attended	financial literacy.Goi Financial Literacy		
• Interest on Financial programs in social media.	ially literate and wi Knowledge about:		
In social media.	1).		
	Bank Loans		
Economic Conditions	Pension schemes,		
Average Family income	• Insurance		
• Perception of business	odical study of the observable influences of behaviour		
opportunities available in the	(Goldhaber, 2000). Pavlov, a founding behaviourist,		
• Taxation	e learned, modified, and extinguished by altering the		
	the behaviour occurs (Sebstad& Morcos 2011)		
Conditions initiodatery in which	Personal Characteristics		
Family Characteristics	financial literacy can be • Gender		
• Family head'slevel of	• Age		
education	refore through this theor • Year of study		
Geographical background	inancial literacy.Going d		
(Rural or Urban), • Family size	Learning Theory		
The learning theory offers a met	nodicalistation of behaviour		
and how people acquire habits			
documented that behaviour can	be Average Monthly inguished by altering the		
conditions immediately in which	th Personal Income & Morcos, 2011).		
Financial literacy can be learn	ial education programs.		
.I			

# Figure 1: Conceptual Framework

# **2.6 Operationalization of Variables**

# **Table 2.1: Operationalization of Variables**

Variable	Definition	Indicators	Citation
Financial literacy	Individual capability to practice economic data hence making informed choices on financial planning, arrears, pensions and ways of accumulating wealth.	<ul><li>Knowledge about:</li><li>Budgeting</li><li>Bank Loans</li></ul>	(Lusardi&Mitc helle 2014)
Financial Experience	Expertise regarding core financial instruments obtained from an individual's financial undertakings	<ul> <li>Having a bank account</li> <li>Owns a business,</li> <li>Has invested in financial securities</li> </ul>	(Njoroge, 2013).
<b>Financial</b> Training	Actions, courses to improve the skills of individuals towards financial understanding	<ul> <li>The type of degree pursued</li> <li>Financial conferences attended</li> <li>Interest on Financial programs in social media.</li> </ul>	(Widdowson& Hailwood, 2011).
Economic Conditions	Status of the financial position characteristic to an individual at a specific period	<ul> <li>Average Family income</li> <li>Business opportunities available,</li> </ul>	(Wachira, &Kihiu, 2012).

		• Taxation	
Family	Attributes in an individual's	• Level of	(Holzmann,
characteristic	family that may impact his/her	education of	2010)
	financial literacy	family head.	
		<ul> <li>Geographical</li> </ul>	
		background	
		(Rural or Urban),	
		• Family Size.	
Personal	Unique traits in an individual	• Gender	(Kefela, 2011).
Characteristics	such as gender, age, academic	• Age	
	performance or any other attribute	• Year of study	
	that may influence financial		
	behaviour		
Personal	The entirety of a person's income	• Average monthly	(Potrich, Vieira,
Income	amid a period, for example, pay	Personal Income.	& Mendes-Da-
	or wages, benefits acknowledged		Silva, 2016)
	from latent undertakings that may		
	affect their financialliteracy.		

# **CHAPTER THREE:**

# **RESEARCH METHODOLOGY**

#### **3.1 Introduction**

This chapter features the researchdesign employed in the study as well as the target population, sampling, data collection and data analysis. The chapter offers a framework to conduct the study and guide all activities in the study.

#### 3.2 Research Design

A research design is a coherent presentation of the components of a study in a logical manner to ensure that research meets its objectives and that it addresses the research problem effectively (Lewis, 2015). This study will employ descriptive design. According to Creswell (2013), a descriptive design is employed to facilitate studying subjects by observing and describing their characteristics without influencing them in any way. A descriptive research describes a situation or condition at hand; it examines aspects such as opinion, abilities, behaviour, knowledge and beliefs of individuals, groups or situation (Kothari, 2005), thus suitable for this study. This is relevant to this study since it will suit the empirical approach employed.

## **3.3 Population**

The population of a study refers to a group of individuals drawn from the universe based on a common characteristic (Matthews & Ross, 2014).Purposeful sampling will be used to pick one university with the highest number of students and who are more diverse in terms of the students' background and courses offered(University of Nairobi). In this study, the people targeted are University of Nairobi students from different departments, which include;agriculture and health sciences, biological,physical sciences and engineering, arts, and architecture and education. The University of Nairobi has an enrolment of 84000 students (University of Nairobi Fact File, 2017), which will be identified to form the population. These respondents will be used to generate data on socio-economic factors influencing financial literacy among university students in Kenya.

## 3.4 Sample Frame and Sampling Technique

A stratified random sampling is a method used to select and sample the respondents based on selected departments. According to Kothari (2004), calculating the sample size requires the researcher to determine the acceptable error margin, confidence level, and the expected response distribution. The researcher can tolerate an error margin of 5% since secondary data has revealed that socio-economic factors largely influence financial literacy. The confidence level is the amount of uncertainty that the researcher can tolerate (Creswell, 2013), which in this case is 95%. As indicated on the University of Nairobi Fact file (2017), the university has a student population of 84000. The sample size is calculated using the below formula taken from Kothari (2004).

$$n = \frac{z^2 \cdot N \cdot \partial_p^2}{(N-1)e^2 + z^2 \partial_p^2}$$

Where; *n* is the quantity of the sample, *N* the size of the inhabitants and given as 84000,e the acceptable error and given as 5%,  $\partial p$  the standard deviation of the population and given as 0.5 where exact values are not known, and Z the standard variation at a confidence level given as 1.96 at 95% confidence level. The result is that the researcher should have a sample size of 383 participants.

	Population of	Percentages	Sample Size
	Students		
Agriculture & Health	8451	10	39
Sciences			
Biological, Physical	11655	14	53
Sciences &			
Engineering			
Arts & Architecture	24119	29	110

## 3.0 Table; Sample Size

Education	18415	22	84
Social Sciences & Business Studies	21360	25	97
TOTAL	84000	100	383

## **3.5 Data Collection Procedure**

Since this study employs an empirical approach, data will be obtained through primary observation(Creswell, 2013). The primary research data will be from the university students by the use of a self-administered semi-structured questionnaire. The study employs self-administered questionnaire where respondents will be expected to fill and submit the filled questionnaires back to the researcher.Questionnaires will be used because they will enable the researcher to collect information more easily and within a reasonable time (Kombo et al., 2006). Care and control by the researcher will be practiced to guarantee all polls issued to the respondents are gotten. To accomplish this, the researcher will keep a register of the administered questionnaires as well as those returned to facilitate identification of the response rate.

# 3.5.1 Validity and Reliability

Validity is the level in which the investigative tools measure what they are expected to measure.Testing legitimacy is a non – parametric factual strategy which builds up whether the poll content is measuring what they should quantify. The instruments will undergo pilot testing and approval. The pilot study will be conducted at a different university (Mount Kenya University) other than University of Nairobi to eliminate bias should the questionnaire pass for use in the actual study. Mugenda and Mugenda quoting Gay [1992] posit that validity of an instrument is to build up estimation, exactness after rehashed trials. Content validity will be utilized to test/measure the legitimacy of the instruments. Content validity alludes to whether the instruments measure all ideas it was expected to gauge. Validity will be provided by developing all the essential things on the research instruments and guaranteeing that all destinations of the investigation are covered in the instruments.

Reliability is the capability of a research tool to offer the same results when used repeatedly (Matthews & Ross, 2014). The researcher will utilize the most widely recognized interior consistency measure known as Cronbach's alpha ( $\alpha$ ). The inward consistency of the instruments will be tried by the test – retest strategy. Reliability is the measure of consistency by which instruments give comparable outcome on various yet equivalent events or a measure of how much an instrument gives comparable outcomes over a number of rehashed trials (Orodho, 2004; Mugendaand Mugenda (2003). The survey will be tried for reliability utilizing split half strategy "the technique includes scoring two parts generally odd and even things of a test independently for every respondent and afterward figuring the co-relation coefficient for the two sets [halves ] of scores . The coefficient shows how much the two parts of the test gives similar outcomes and thus depicts the inside consistency of the test. The scientist will utilize Spearman Brown prophecy formula in which a coefficient of 0.70 is viewed as satisfactory, yet a coefficient of 0.80 is great as per Gay (2003). In this examination, the suggested estimation of 0.7 will be utilized as a cut-off of reliabilities with an objective if accomplishing a coefficient of 8.0.

#### 3.6 Data Analysisprocedures.

#### **3.6.1 Descriptive Analysis**

Data collected will be entered into MS. Excel to facilitate tabulation and coding while checking for completeness in preparation for subsequent operations. As Creswell (2013) explains, verifying data eliminates clerical errors which enhance the accuracy of the results obtained from further analyses. The data will be analysed using IBM SPSS Statistics Version 24, which is the latest version to offer descriptive measures such as number of recurrences, proportion, mean and standard deviation. According to Martin and Acuna (2002), SPSS statistics by IBM offers suits empirical studies since it has a wide spectrum of arithmetical measures which are intended for social sciences. The findings will be presented using frequency tables, comparative graphs, and pie charts.

#### **3.6.2 Factor analysis**

As Matthews and Ross, (2014) explain that factor analysis is the process of reducing a big figure of variables into a function of causes to investigate the relationship between complex concepts. Factor Analysis will offer a basis to model the watched factors, and their covariance structure, as far as fewer hidden undetectable variables. In thisstudy, factor analysis will be performed on the

following variables; financial experience, economic conditions, family characteristics, financial training and financial training. This is because they have underlying numerous indicators and hence this analysis will help reduce the set of variables in the dataset into few interpretable/important factors.

Moreover, a multiple linear regression model will be used to decide the relative significance of each of the five factors regarding financial literacy among college students in Kenya. The model will be as per the following:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \beta_4 X_4 + \beta_5 X_5 + \varepsilon$$

Where

Y = Financial literacy among university students

- $\beta_0$  =Constant (coefficient of intercept)
- $X_1$  =Financial Experience
- $X_2$  =Financial Training
- $X_3$  =Economic Conditions
- $X_4$  =Family Characteristics
- $X_5$  = Personal Characteristics
- $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ : Regression coefficients, and,

 $\varepsilon$  is the error term.

#### **3.6.3 Diagnostics tests**

Diagnostics tests will, therefore, be performed to ascertain the multicollinearity and heteroscedasticity. Multicollinearity test will be useful to ascertain the degree of correlation among the autonomous variables (Matthews & Ross, 2014). This test will be performed in this study to detect multicollinearity problem where, if not controlled it may result to unstable parameter estimator which makes it very difficult to assess and interpret the effect of independent variables on the dependent variable .Variance inflation factor (VIF) will also be

needed to identify multicollinearity problem in the model from the study variables. Variables whose VIF values are greater than 10 indicate the presence of multicollinearity problem which needs to be corrected. In many cases this problem arises as a result of using too many independent variables to measure the same dependent variable. If this problem exists then, it can be corrected by dropping the variable with high VIF in order to convert the other variables from non-significant to significant (William, 2008).

Heteroscedasticity is used to depict the situation where the variance of the model is not the same for all perceptions. Regularly one of the essential in displaying is that the changes are homogeneous and that the errors of the model are identically distributed. In linear regression, the way that the errors of the model(also named residuals) are not homoscedastic has the result that the model coefficients evaluated utilizing ordinary least squares (OLS) are neither one-sided nor those with least difference. The estimation of their difference is not dependable. As indicated by Creswell, (2013) heteroscedasticity is available when the extent of the mistaken term varies crosswise over estimations of an independent factor. The test will unmask the examples where the fluctuation of the model is not the same for all perceptions. Various tests that will be performed include the Breusch-Pagan test and the White Test

#### 3.6.4 Moderating effect

The moderating variable is the personal income and each variable will be presented as a function of personal income.

The regression model is illustrated as:

$$Y = \beta_0 + \beta_1(X_1, X_6) + \beta_2(X_2, X_6) + \beta_3(X_3, X_6) + \beta_4(X_4, X_6) + \beta_5(X_5, X_6) + \varepsilon$$

Where

Y = Financial literacy among university students

 $\beta_0$  =Constant (coefficient of intercept)

 $X_1$  =Financial Experience

 $X_2$  =Financial Training  $X_3$  =Economic Conditions  $X_4$  =Family Characteristics  $X_5$  = Personal Characteristics  $X_6$  =Personal Income

 $\beta_1, \beta_2, \beta_3, \beta_4, \beta_5$ : Regression coefficients, and,

 $\varepsilon$  is the error term.

The significance of the moderating variable will further be checked using the adjusted  $R^2$  test. The accustomed R-squared is a customized version of R-squared in support of the number of predictors in a model (Mertler, & Reinhart, 2016). The accustomed R-squared will be employed as it offers best gauge of the level of relationship in the fundamental populace.

## **3.6.5 Robustness Checks**

Lastly, robustness checks will be utilized to decide the impact of adjusting the factors on the execution of the model. As indicated by Hayes and Preacher (2014) this tests are vital as they check the execution for information drawn from an extensive variety of likelihood conveyances, particularly for distributions that are not normal. In this investigation, different robust checks will be performed in order to decide the strength of each of the factors on financialliteracy and also to discover how certain coefficient estimates act when the regression particular is altered by including or expelling factors.

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#### **APPENDICES**

#### Scholar (s) Year of Topic **Findings Research Gap** Study Mahfudh, M. Financial From the research it was The research gap (2014). A. Literacy and evident that financial literacy presented by this Investment levels have a significant study is that focus relationship with income and **Decisions** In was on the NSE Kenya: A Case occupation of the individual instead and not of Individual local investors but do not university students Investors in the affect gender and age of the Nairobi investors. Securities Exchange Chung-Sook, (2014). Gender The findings indicate that, in The research gap М., Differences in the model estimation stage, as presented by the scales for behavior and Kyungyoung, Financial this study is that it attitude have been reduced. O., &Chul, C. Literacy was based on among Chinese Among all of the models Chinese university University estimated, the best adjusted students rather Students and model indicates that financial those in Kenya. the Influential knowledge and financial attitude have positive impacts Factors on financial behavior.

#### **Appendix I: Research Gap**

Pintye, A., & Kiss, M.	(2016)	Financial Literacy Of Students In Business And Economics Higher Education	The results of the survey highlight the importance of taxation as a component of financial literacy, opportunities for cross- disciplinary tax teaching and insights for tax teaching and advisor training more broadly.	The study presented the research gap having failed to study students in Kenya and focusing on all students not only
				business and economics students.
Shambare,	(2012).	Financial	Results indicated moderate	The research gap
R.,		literacy among	levels of financial illiteracy;	presented by this
&Rugimbana,		the educated:	suggesting that even among	study was that it
R.		An exploratory	the educated, there is a need to	focused on South
		study of	reinforce basic financial	African university
		selected	concepts. Some implications	students and not
		university	for financial service providers	Kenyan.
		students in	in interacting with literate	
		South Africa	consumers who may be	
			financially illiterate are	
			provided	

# Appendix II: Letter of Introduction Dear Respondent,

I am \_\_\_\_\_\_, a \_\_\_\_\_from \_\_\_\_\_ in Kenya. I am conducting a research on socioeconomic factors influencing financial literacy among university students in Kenya. The aim of the questionnaire is to gather information for educational purposes.

Kindly bear in mind participation in this exercise is entirely voluntary and no personal benefits or rewards will be given. All the information you will give will be treated with absolute confidentiality and will only be used for purposes of gathering information for research.

Thanking you in advance for your cooperation

Yours sincerely,

### **Appendix III: Research Questionnaire**

Kindly answer the questions in this section by ticking in the boxes provided.

## **A: FINANCIAL EXPERIENCE**

1.	Do you have a bank account?				
Yes	No No				
2.	Do you own a business?				
Yes	No				
If yes,	kindly specify				
3. Have you invested in any financial securities?					
Yes	No No				
If yes, kindly specify					

## **B: FINANCIAL TRAINING**

- 4. Which course are you pursuing?.....
- 5. Have you received any form of financial training either formal/Professional or informal /Non-Professional which to be specific and how did it impact your financial literacy levels?.....

.....

Hint; ICPAK, ACCA Church Seminars.

6. How frequent do you receive/attend this training program?

A)Weekly ..... b) Monthly..... c)Quarterly..... d) Yearly.....

7. Do follow any financial programs on the social media?

Yes No

If yes, kindly specify.

# **C: ECONOMIC CONDITIONS**

8.	What	is t	he aver	age month	ly inco	ome o	of you	r hous	seholo	d/ parent	s Income?
9.	What	busir	ness or	businesses	would	you	begin	given	the	required	resources?
10.	Do yo	u thin	k there a	re business	opportur	nities i	n the ec	conomy	for s	tudents?	
Ye	s [			No							
11.	Do yo	u pay	taxes?								
Yes				No							
If yes,	kindly	specif	fy your ta	ax obligation	ıs						

# **D: FAMILY CHARACTERISTICS**

12. Which of these describes the community you were brought up in?
Rural (village)   Urban (town)
13. Who is the head of your family?
Father Mother Guardian
14. What is the age of the head of your family?
15. What is the highest academic achievement of the head of your family?
16. Kindly indicate the size of your family:
(How many children).
17. How many children under the age of 18 live with you?
18. How many people aged 18 and over live in your household?

## **E: PERSONAL CHARACTERISTICS**

19. Kindly indicate your gender (tick)

Male	
Female	

20. What is your year of birth? \_\_\_\_\_

## 21. Kindly indicate your year of study

Year	1	
Years	2	
Year	3	
Year	4	
>Year	4	

## **F: PERSONAL INCOME**

22. Kindly tick all your source of income:

Salaries	
Personal investments	
Government securities	
Siblings	
Other (Specify)	

23. What is your average monthly personal income?.....

## SECTION C: FINANCIAL LITERACY.

24	Does	vour	household	l have	a	budget?
∠-т.	DUUS	your	nousenon	Inave	а	buuget.

a) Yes b) No c)Don't know

25. Do you use a budget for your personal financial plan?

Yes		No	
-----	--	----	--

26. Have you heard of any of the following financial products?

 a) Bank Loans b) Pension Schemes c) Insurance Schemes d) Financial Securities e) Others(Specify).....

27. Do you currently make use of the above products?

Yes		No	
28. If	Yes which one? (Specify	)	

Thank you for participating.