# SOCIAL-CULTURAL FACTORS, ATTITUDE, KNOWLEDGE AND PURCHASE INTENTION OF COUNTERFEITS IN KENYA

BY

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# A THESIS SUBMITTED TO THE SCHOOL OF BUSINESS AND ECONOMICS, DEPARTMENT OF MARKETING AND LOGISTICS IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN BUSINESS MANAGEMENT (MARKETING OPTION)

**MOI UNIVERSTY** 

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# DECLARATION

# **Declaration by Candidate**

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# DEDICATION

This work is dedicated to my wife, Mrs. Regina, and my children, Ben, Specioza, William, and Catherine for the support during my studies.

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#### ABSTRACT

Counterfeit consumption has been on an upsurge globally aided by comparative higher trade margins and increasing demand for renowned brands at lower prices. Social cultural factors have been found to play a major role in the growth of the trade as they influence the intention hence purchase of such goods although findings so far are not conclusive, necessitating further examination. This study therefore aimed to investigate the moderating effect of consumer knowledge on the relationship between social cultural factors (SCF) and Purchase Intention (PI) through attitude. The study specific objectives sought to establish the mediation effect of attitude (ATT) on the relation between SCF and PI, the moderating effect of consumer knowledge (CK) on the relationship between consumer attitude towards counterfeits and PI and the moderated mediation effect of CK on the indirect relationship between SCF and PI through attitude. The study was guided by the Theories of Planned Behavior, Reasoned action, Moral competence and consumer theory. The study applied an explanatory research design and adopted a positivism research paradigm to collect data from the target population, university students by means of semi structured questionnaires using purposive and convenience sampling. Excluding missing data and outliers from the 500 students sampled, data collected from 450 respondents were analyzed with Hierarchical and multiple regression models using Hayes Process macro and the results used to test the hypotheses. The study findings showed a positive and significant relationship between Social cultural factors (SCF) and Purchase Intention (PI) ( $\beta_1$ =0.579, P<0.05, r<sup>2</sup>=0.334), SCF and ATT ( $\beta_2$ =0.415 P<0.05  $r^2$ =0.170), and ATT and PI ( $\beta_3$ =0.427 P<0.05,  $r^2$  = 0.181). Further, the results indicated that ATT had significant mediating effect on the relation between SCF and PI (0.1080, [Lower limit confidence level (LLCI) 0.593,Upper limit confidence level (ULCI) 0.167]), consumer knowledge(CK) had a significant moderation effect on the relation between ATT and PI (.1431, [LLCI .2478, ULCI .534]) and that CK had a positive ( $\Delta R^2 = 0.0042$ , [F=5.25, P<0.05]) moderated mediated effect (index 0.0668,[ LLCI 0.128, ULCI 0.1361) on the relationship between SCF and PI through ATT. Therefore the study concludes that Social Cultural Factors have an influence on Purchase Intention while Attitude intervenes significantly in the relationship between Social Cultural Factors and Purchase Intention with the relationship conditioned by Consumer Knowledge at different levels of interaction. The study contributes to knowledge by revealing a complimentary mediation effect of attitude in the relationship between social cultural factors and purchase Intention and also new knowledge on the moderation role of consumer knowledge on the relationship of variables of the study. The study recommends that companies incorporate consumer education in their growth strategies, invest in plans to influence consumer attitude towards their brands but also join efforts with government agencies to formulate policies and laws which discourage counterfeit trade, manufacturers put product differentiating features and information on the packages and that future researchers replicate this study using longitudinal survey methods and in different contexts.

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## **OPERATIONAL DEFINITION OF TERMS**

- Attitude Refers to individual's feelings and thought about any item in the environment including products and brands. Attitude is the way people act and think, positively or negatively about and item or idea.
- Consumer Consumer knowledge is the level of stored experience and information Knowledge people have about an item or product, whether positive or negative. It is the ability of an individual to give or have informed opinion about an item or product
- Counterfeit Counterfeit goods are goods made with an intention to lie to a potential buyer to thinking that they are buying the original product. They are goods made with a deliberate plan to deceive potential clients into buying an item thinking they are buying the original.
- Materialism Materialism is the level of importance one attaches to belongings or ownership of one item or another. It refers to the level of emphasis and value one attaches to ownership of goods and other earthly things, and the amount of effort one puts in to acquire such. It is the level of generosity associated with someone.
- Moral It refers to level someone values ethics and concern for doing the right Intensity Intensity when the wrong things are the most convenient and particularly when in a situation where they can do the wrong thing and no one will know. It is the aspiration to choose the right thing even when there are some attractive, easier but wrong alternatives.
- Purchase Is the will and plan to purchase a good or service. It describes a Intention person's conscious and deliberate plan to either go out to shop for a product or the plan and action to check and compare the available choices with an intention to make a decision.
- Subjective This is the degree to which a person's decision to act one way or Norms another is influenced by the action of others or the thought or consideration of how other people may react if they know that one took a particular decision. It refers to the extent to which someone's action would be sanctioned by close people especially friends and relatives.

Value Value consciousness refers the extent to which a buyer considers the Consciousness level of utility or value they would get from a purchase. It includes the mental calculation of how much value one gets per unit of currency spend, and the sub conscious desire for one to get as much value as possible form their money.

# ACRONYMS AND ABBREVIATION

ACA	Anti-counterfeiting authority
ANOVA	Analysis of Variance
ATT	Attitude
CA	Competitive Advantage
CI	Confidence Interval
СК	Consumer Knowledge
DV	Dependent variable
GOF	Goodness of fit
GoK	Government of Kenya
GSK	GlaxoSmithKline
ICC	International Chamber of Commerce
IPR	Intellectual Property Rights
IV	Independent Variable
KAM	Kenya Association of Manufacturers
KIM	Kenya Institute of Management
KNBS	Kenya National Bureau of Statistics
LLCI	Lower Limit confidence Interval
MAR	Missing at Random
MCAR	Missing completely at Random
PhD	Doctor of Philosophy
PI	Purchase Intention
RoK	Republic of Kenya
SCF	Social Cultural Factors
SD	Standard Deviation

SE	Standard Error
SEM	Structural Equation Model
SME	Small And Medium Enterprises
SPSS	Statistical Package for Social Sciences
TMC	Theory of moral competence
ULCL	Upper Limit Confidence Interval
VIF	Variance Inflation Factor

#### **CHAPTER ONE**

# INTRODUCTION

#### **1.0 Overview**

This chapter contains the study's background, as well as the statement of the problem, the study's objectives, hypotheses, and significance, as well as the study's scope. It is in this section that the study's background, problem statement and goals, hypotheses and significance are all laid out.

# **1.1 Background of the Study**

The commercialization and Consumption of counterfeit goods has been on the increase and has become a major concern in the world because of the disastrous effect it has on genuine business (Chaudhry et al., 2009; Wilcox, Kim, & Sen, 2009). The vice has been in the increase because of the expensive and high-status characteristics of some brands, increasing consumer information about leading brands and the desire of consumers to purchase and enjoy the best brands the world has to offer and the inefficiencies in the supply chain for genuine goods. Nunes (2019) reports that the commercialization and spread of illicit goods including pirated and counterfeit goods undermines the generation of new formal jobs in the world. Barreto (2011); Almeida (2017) reported that studies have shown that this type of trade is often interconnected with criminal activities, including muggings and terrorism, and is included in the category of smuggling weapons and drugs in many jurisdictions

Purchase Intention has been studied as surrogate for purchase by several scholars. For instance Banerjee & Dholakia (2012) claims that Purchase Intention is the chance of buyer to buy the said product while Chen & Hsieh (2012) opines that Purchase Intention is a buyers conclusion on purchasing a given enterprises offering bearing in mind prevailing conditions. Gao & Rau (2009) on their part suggested that Purchase

Intention is a buyers inner drive in choosing a particular product or brand. According to Kim, Haley & Koo (2009) consumer intention to visit a shop should be taken to be enough indicator of intention to purchase a product.

Varan, Murphy, Hofacker, Robinson, Potter & Bellman (2013 while quoting various writings on Purchase Intention of consumers said that thinking of purchase, willing to purchase, and recommending for others are acceptable dimensions of a will and intention to buy.

Purchase intention (PI) indicates the degree of consumer feeling how confident they are to buy a product or service Balakrishnan, Dahnil & Yi, (2014) and is perceived as the key predictor of actual behavior, enabling interested parties a better opportunity to predict overt purchase behavior Peña-García, Gil-Saura, Rodríguez-Orejuela & Siqueira-Junior (2020). Further Rahim, Safin, Kheng, Abas, & Ali (2016) indicated that consumers decide to buy a product after searching for information so as to buy the right product to meet their needs and desires. In this research, Purchase Intention is the pivotal construct to be investigated.

Idinga (2015), states that the intention captures the motivational factors influencing behavior so that people are willing to engage in a certain behavior before they perform. From the Theory of planned behavior, a consumers' behavior is as a result of ones' intention to perform such an act, while the willingness or unwillingness to perform or act is as a result of the attitude towards a behavior (favorable or unfavorable assessment), subjective norms (perceived social pressure) and perceived behavioral control (a person's perception of easy or difficulty in doing the behavior), Ajzen (1991).

This willingness to buy counterfeits has created a worldwide dilemma, on the reasons consumers choose to buy counterfeits rather than authentic items. Counterfeiting costs the economy an estimated \$200 billion annually in lost employment and taxes, according to Furnham & Valgeirsson (2007). Carty (2009) states that the value of counterfeits in worldwide markets grew by 1,100 percent between 1984 and 1994.

On a worldwide basis, counterfeit products have become a huge economic problem. According to the International Chamber of Commerce (ICC) (2017), pirated and counterfeit products pose risks to the health and safety of consumers around the world, in addition to representing a deficit of 5.4 million formal jobs by 2022. Additionally, the global economy suffered a loss of US\$ 4.2 million due to the sale of illegal products (ICC, 2017). According to Blakeney (2009), counterfeit trade is fueled by the fact that the trade has high profits that offer greater returns than other illicit trades like drug trafficking. The counterfeit trade has expanded tremendously, majorly due to globalization and consumer needs and wants; this has resulted in the ease of global transportation of counterfeit goods.

Trademark infringement has now become a great concern in the world, as counterfeiting has now cut across different industries in business-to-business and business-to-consumer markets in both emerging and developed markets. These illegal practices can be minimized by reducing either the supply or demand side of the counterfeit trade. There is contention that the supply side of the counterfeit trade has been widely covered in literature. However, the demand side of the counterfeit trade has had little advancement and investigation in the area, hence the need for further research (Ang, Cheng, Lim, & Tambyah, 2001).

According to Ajzen & Fishbein (1980), a person's attitude is related to their intentions, and so serves as a practical predictor of conduct. They claim that there is a link between attitude, intention, and behavior, implying that individuals usually perform actions in accordance with their intentions. As a result, individual and interpersonal level factors influence behavior intentions, whereas intentions predict final behavior. Studies by Kim & Hunter (1993), have shown that behavioral intentions are an antecedent of real behavior. Ajzen (1985) argued that intent is predicted by an individual's attitude toward conduct, subjective norm, and perceived behavioral control, which leads to behavior.

The Kenya Association of Manufacturers (KAM) reported that up to 40% of certain goods sold in Kenya in 2008 were counterfeit, according to the Anti-Counterfeit Agency (ACA). According to the organization, Kenyan SMEs lost 50 billion shillings (\$650 million) to counterfeits in 2008, while the government lost 19 billion shillings (\$250 million) in taxes. Kenyan manufacturers lost up to 30% of their income due to counterfeiting in 2010, while the economy lost 27% of its jobs.

The prevalence of counterfeit and pirated goods in the country has impacted the market share of legally registered enterprises in Kenya. Some of the reported cases in Kenya by KAM have been that Sara Lee has reduced its production capacity in Kenya to less than 40%, GSK closed its manufacturing plant in Kenya while reports have shown that Eveready has lost 70% market share to counterfeits. (Opala, 2009) opines that the illicit trade in counterfeit goods and smuggled goods in Kenya is now worth more that the country's primary foreign exchange earners, such as tourism and tea and coffee, as it is estimated to be \$735 million. Beside , a report by the Kenya Association of Pharmaceutical Industry shows that about 30% of the drugs in Kenyan market are counterfeit and that Kenyans are believed to be spending about Kenya

Shillings 4 Billion (US\$47 million) each year on fake medicine. The Kenya Anti-Counterfeit Agency (ACA) believes that as much as 40% of malaria drugs sold in Kenya are counterfeit

Several studies, mostly in Europe, America, and Asia, have demonstrated the destructive effects of counterfeits on global economies, societal well-being, and people's lives. Most of these studies have been on the supply side of counterfeits, why suppliers make and supply the said goods.

Culture, particularly as it varies among countries, has been shown to have a substantial impact on the demand and supply side of counterfeiting, according to studies by Eining & Christensen (1991) and Swinyard, Rinnie, & Kau (1990).

Very little research has been done that looks into the variables that drive people to buy counterfeit goods as far as the researcher knows. Yoo & Lee (2009), for example, looked at the antecedents of customer purchase intentions for original brands and their counterfeits in South Korea and discovered that buyers have a positive attitude toward imitated goods. A similar study was carried out by Faria (2013) with concurring results. Both scholars recommended further research to be carried out in different contexts since attitudes are specific to culture. Moral intensity, materialism, and subjective norms have all been found to influence a buyer's perception of a product. This research considers it important to study the consumption hence purchase intention of consumers, so as to offer insights into the reasons people purchase and consume counterfeits goods.

As far as we know, just a few research studies have been conducted in Kenya on the subject of counterfeit. The handfuls that have been carried out have only focused on the supply side of the issue, with little done on purchase intentions in Kenya. To the best of the researcher's knowledge, there has been no research into the impact of customer attitudes on the relationship between consumer attitudes and counterfeit buying intent. For example, Muthiani & Wanjau (2011) investigated factors that influence counterfeit growth in the pharmaceutical industry, whereas Karingu & Ngugi's (2013) investigated the factors that influence counterfeit agro-based product penetration, with an emphasis on suppliers.

#### **1.2 Statement of the Problem**

Advancement and development of illegitimate trade including counterfeit business is a major cause of apprehension for all economies but more so for budding economies including Kenya. The government has put in efforts to check the upward trajectory but all these government efforts have not been successful. The purchase and consumption of counterfeit goods is on the rise growing every other year with devastating effects on legitimate trade.

There has been an increase of trade in counterfeit products goods over the last few years with some estimates putting the illicit industry in the country at Sh.70Billion (nearly US\$.835 million), matching key Gross Domestic champions such as tourism, coffee and tea (Opala 2009, November, 21) "Merchants of Fakes Reap Sh70bn and Put Lives at Great Risk," Daily Nation, retrieved and Jobs from: https://nation.africa/News,tem/1/wkyff9/index.html Data from the Kenya Association of Manufacturers, (2008) shows that the cost of counterfeits to Kenyan Small and Medium Enterprises (SMEs) is above 50 billion shillings (\$650 million), while the government on its part lost 19 billion shillings (\$250 million) in taxes in 2008 (GOK, 2010) while Wadlow (2009) reported that counterfeit pesticides decimated Kenya's entire coffee industry in the 1980s, due to counterfeit dust formulations using chalk dust. This increase in counterfeit purchase intention costs the government revenue; trader's profits owing to decline in legal business and consumers the value for their money as they consumer lower quality products. Manufacturers, Companies and marketers need to know the consumer behavior in general and towards counterfeits in particular as a way of growing their own capability and cultivating own competitive edge in the market. Legitimate brand owners need to understand the reason for increasing trade in this trade despite government efforts to curtail it. Purchase intention which is a person's resolve to acquire a specific product offering has been used over time and interpreted as a proxy for the actual purchase, more so in studying consumption of counterfeits (Fishbein & Ajzen 1975). This is because Purchase Intention identifies a person's decision to purchase a particular brand that they have made after careful consideration. Studies by (Laroche & Sadokierski, 1994) have indicated that consumer purchase intention of an item depends on attitude towards the said item. Purchase intention is classified into Thinking of purchase, willing to purchase, and recommending for others to purchase (Varan et al 2013) and is regularly related with consumers' behaviour, perception and their attitude. Prior Studies have established that an increase in Purchase Intention reflects an increase in the chance of purchasing Martins, Costa, Oliveira, Gonçalves & Branco (2019), hence it's a good starting point to understand purchasing.

This growth in counterfeit business despite Government efforts makes it necessary to carry out further research in the business. This is exacerbated by the fact that very researches on counterfeiting have been undertaken in Kenya as far as the researcher knows, and those done have concentrated on the medical field, where ethics are upheld more rigidly than in other areas of the marketing industry. For instance the impacts of supply chain dynamics, information flow, consumer characteristics, and dynamic technology on the proliferation of fake agricultural goods in Kenya were the main topics of Karingu et al., 2013 research. The major subjects of Muthiani's (2011) analysis into the factors influencing the growth of counterfeit pharmaceutical SMEs were the influence of supply chain dynamics, information flow, legislation, brand equity, pricing strategy, and perceived risks. A permissive legal system, consumer attitudes toward illicit pharmaceuticals, and higher pricing for imported drugs are three other factors that Opiyo (2006) identified as contributing to pharmaceutical counterfeiting. Nasra (2016) sought to establish the impact of counterfeit drugs on pharmaceutical businesses in Mombasa County, as well as the role of the pharmaceutical drugs regulatory body on the distribution of counterfeit drugs. The majority of descriptions regarding the scope of counterfeiting, outside of research, are anecdotal rather than empirical. A research from 2007 by the Kenya Association of Manufacturers (KAM) is an example of a document that recognizes the issue but places all the responsibility on the regulatory environment.

Historically there is a dominance of separate experiments for mediation and moderation in the research field; as far as the researcher knows there are very few marketing studies that have tested for moderated mediation effects despite the fact that these models provide robust and precise results to the extent that they simultaneously include the different effects, providing an overall vision of the process studied (Borau, Akremi, Elgaaied-Gambier, Hamdi-Kidar, & Ranchoux. (2015). This study adopted the use of a moderated mediation model to fill this gap by investigating the effect of social cultural factors, attitude and consumer knowledge on purchase intention of counterfeit goods in Kenya.

This research sought to understand how consumer social cultural factors influence their purchasing intentions, understand the mediation effects of attitude on that relationship, to expound new insights into the factors that influence consumers' intentions to buy phones in Kenya, to explore the moderated mediation impact of consumer knowledge in that relationship and to fill the gap on knowledge in the mobile phone business where the challenges are different from those in agriculture or medical field, and as a consequence, the latter two's results learning's cannot be transferred to the former.

# 1.3 Objectives of the Study

The study's objectives in this research were divided into general and specific objectives, as shown below.

#### **1.3.1 General Objective**

The general objective of the study was to determine the moderating effects of consumer knowledge on the mediated relationship between social cultural factors and purchase intention of counterfeit mobile phones in Kenya.

#### **1.3.2 Specific Objectives**

The specific objectives of the study were:

- To establish the effect of social cultural factors on the purchase intention of counterfeit mobile phones in Kenya.
- To investigate the effect of social cultural factors on the consumer attitudes towards counterfeit mobile phones in Kenya
- To determine the effect of consumer attitude towards counterfeit phones on purchase intention in Kenya.
- 4) To determine the mediation effect of attitude on the relation between social cultural factors and Purchase intention of counterfeit mobile phones in Kenya.

- 5) To establish the moderating effect of consumer knowledge on the relationship between consumer attitudes towards counterfeit mobile phones and Purchase intentions.
- 6) To establish the moderated mediation effect of consumer knowledge on the relationship between Social cultural factors and purchase intention through attitude

## **1.4 Research Hypotheses**

The study sought to test the following hypothesis as a means achieving the corresponding objectives stated above

- H<sub>01</sub> Social cultural factors have no significant effect on the purchase intention of counterfeit mobile phones in Kenya.
- H<sub>02</sub> Social cultural factors are not significant determinants of attitude towards counterfeit mobile phones in Kenya?
- $H_{03}$  There is no significant effect of Attitude towards counterfeits on purchase intention in Kenya
- $H_{04}$  Attitude does not mediate the relation between social cultural factors and Purchase intention of counterfeit mobile phones in Kenya
- H<sub>05</sub> Consumer knowledge has no significant moderation effect on the relationship between attitude and Purchase Intentions of counterfeit mobile phones in Kenya.
- H<sub>06</sub> Consumer Knowledge has no significant moderation mediation effect on the relationship between social cultural factors and purchase intention through attitude

## **1.5 Significance of the Study**

The study adds to our understanding of marketing, particularly in the areas of counterfeiting and illegal trading and adds to our understanding of the characteristics

that influence counterfeit phone buying intentions. This viewpoint provides future scholars with a theoretical foundation on which to critique or extend the idea. For example, it provides a beginning point for future scholars to duplicate in a different culture, setting, or context. First it investigates the relationship between social cultural factors and purchase intention of counterfeits in Kenya. Second the study investigates if the social cultural factors also have effects on attitude itself and whether the attitude therein has significant effect on intention to purchase counterfeits. Knowledge of whether social cultural factors translate to purchase intention or not would give managers better insights so that they can target their anti-counterfeit messages towards the right audience. This information would help brand managers to understand the challenge counterfeits present in today's business so that they can reliably predict and manage their businesses, considering the spurious effect of counterfeits.

Third, the study demonstrates the effect of levels of consumer knowledge on growth of the demand for counterfeit business and specifically if consumer knowledge has any effect on relationship of attitude and purchase intention of counterfeits. This knowledge gives Governments and anti-counterfeiting authority's information on consumer behavior as far as counterfeits consumption is concerned and thus design correct behavior changing models for potential counterfeit consumers. Fourthly it contributes in building theory in the marketing field by extending the existing model as advocated by earlier scholars in a different context as requested by the model of Faria (2013) who said the existing models should be examined in a variety of contexts and cultures, different from Canadians and Chinese which was her scope. Fifthly, it looks at the moderated mediation of by consumer knowledge on the relationship and helps to explain the unexplained variance existing in the old models, enabling managers and authorities to be able to predict and handle situations better.

Finally, this study examines social cultural factors that influence purchase intent and whether customer attitudes mediate the relationship in the case of fake mobile phone purchases in Kenya, East Africa, and compares its findings to previous research on the impact of pharmaceutical and agricultural counterfeits in Kenya done by Karingu (2013), Opiyo (2006) and Muthiani (2011). The study's recommendations aid policymakers, the anti-counterfeiting authority, and governments in developing policies to combat the growth of counterfeit items in Kenya, in addition to fully grasping the dynamics of counterfeiting in other economic sectors. The study's findings contribute to the strategic management literature by revealing the underlying consequences of counterfeits on the growth and development of businesses. The findings of this study would assist CEOs, managers, and marketing managers choose the best ways to combat the counterfeiting threat.

## 1.6 Scope of Study

The study focuses on how social and cultural factors (SCF) affect consumers' intentions to make purchases. It also examines consumer knowledge affect the mediated effects of attitudes on the relationship between consumer's social cultural factors and intentions to make purchases of counterfeit mobile phones among Kenyans. The study was guided by the Theory of Planned Behavior (TPB), Theory of reasoned action and the theory of moral competence the hypotheses were tested using a hierarchical and multiple regression model using Hayes (2018) model 4 for mediation and model 1 for moderation and model 14 for moderated mediation hypotheses. The main respondents in this study were public university students, so selected because students are found to be relatively homogeneous in their behaviors

and attitudes, making them a good sample group Stayman & Brown (1992) and Calder, Philips & Tybout (1981). The study was conducted between the months of August and May 2015.

This chapter underscored the study's historical context and offered a concise overview of counterfeiting from a global, African, and Kenyan perspective. The problem statement, the study's goals, its significance, and its scope were all explained in the chapter. In order to identify research gaps, the next chapter conducts a thorough analysis of the conceptual and empirical literature on the study variables.

#### **CHAPTER TWO**

## LITERATURE REVIEW

#### **2.0 Introduction**

This chapter presents the literature review of the existing empirical studies on consumer social cultural factors; attitude and purchase intentions in order to give a theoretical and conceptual framework for analyzing consumer behavior that leads to competitive advantage and defined all variables and conceptual issues. The chapter also gave an empirical review, summary of literature, research gaps and presented a conceptual research framework which formed the basis for the research hypotheses.

# 2.1 Concepts of the Study

Study of the concepts of the study is important as it enables the researcher to ensure the concepts are well understood.

#### **2.1.1 The Concept of Purchase Intention**

The will power of a person to buy a certain brand is referred to as purchase intention, and it is often used as a stand-in for real purchases. Purchase Intention is a concept that is used to describe those who have given a certain brand or offering their full attention and scrutiny before deciding that they want to buy it. Laroche & Sadokierski (1994) and Laroche, Kim & Zhou (1996) found that a consumer's attitude toward a product is a significant factor in determining the consumer's intention with regard to the product. Because intention denotes a person's level of readiness to carry out a certain conduct, it is synonymous with a person's level of preparedness to act. There is a direct correlation between consumer behavior, attitude, and perception, and purchasing intent. When doing research on and evaluating a product, it is essential to take into account the shopping habits of actual customers (Keller, 2001). According to Ghosh (1990), purchase intention is a good way for predicting the purchasing process. Consumers' preferences for counterfeit brands and the negative adjustment in their preferences for the original brand are stronger when luxury brand attitudes are used for a social-adjustive rather than a value-expressing purpose, as found by Wilcox et al., (2009). Intentions, the plan and desire to make a purchase are the foundation upon which the Theory of Planned Behavior (TPB) is constructed Ajzen, (1991). According to Armitage & Conner (2010) and Ajzen 1991, intentions are "the motivational factors that influence a behavior and to indicate how hard people are willing to try or how much effort they would exert to perform the behavior." In other words, intentions are an indication of how much effort people are willing to exert to perform the behavior (Ajzen 1991). In the context of fakes, buying intentions are the elements that impact and reflect a buyer's purposeful desire to acquire counterfeit items. They also serve as an indicator of whether or not a consumer would actually do so.

According to Fishbein & Ajzen (1975), the customer's purchase intention is influenced by a number of elements, including the buyer's attitude, the buyer's assessment of the product, and external circumstances. This is why it is essential to forecast consumer behavior. Purchase intention allows for the estimation of the possibility that a buyer would go through with a transaction. When a consumer has a greater level of buying intent, it increases the likelihood that they would purchase a certain product.

The perspective and intention is based on attitude towards a behavior and serves as the foundation for the target purchase. According to the Theory of Reasoned Action (TRA), purpose plays a crucial role in the determination of actual conduct and is impacted by the attitudes of other individuals toward a particular behavior act as well as the impacts that the act itself has (Fishbein & Ajzen, 1980). Purchase Intention is defined as the relative strength of a person's intention to participate in purchasing activity, and it is measured compared to other people's intentions. Positive opinions held by customers toward imitation goods have an affirmative effect on their intentions to make purchases of such items.

Studies conducted by Chan & Lau (2001) have indicated that an individual's actual behavior is influenced by his or her reason to participate in a particular action. This reason, in turn, is influenced by an individual's attitude towards the action, his or her motivation to correspond to subjective norms, as well as the perceived control he or she has over the behavior. Ajzen & Fishbein (1980) provided an explanation of the link between behavior, attitude, and intention, which implied that people's actions are often congruent with their intentions.

In the context of the Theory of Planned Behavior, intentions are seen as behavioral plans that come to fruition in situations where individuals have access to the appropriate opportunities and resources to support the accomplishment of their behavioral objectives Armitage et al (2010). It is generally accepted that one's intentions may serve as a reliable indicator of their subsequent actions Honkanen, Verplanken & Olsen (2006). It is common practice in the fields of marketing and consumer behavior to use the word "intention" for terms such as "purchase behavior, choice, and loyalty" (Honkanen et al., 2006).

## 2.1.2 Concept of Social Cultural Factors

Social cultural factors define and affect the way one thinks and acts even in different situations including in the area of consumption. Social cultural factors define a people and differentiate one group from another and people from animals. One of the recognized distinctions between humans and animals is the possession of culture by the former. The existence of culture among human groups makes human beings one of the most superlative beings created by nature Ritzier (2011). Technically, culture represents all of human behaviors that are learned (directly or indirectly, overtly or covertly) through the process of social interaction and which are inherited by generations. Broom & Selznick (1968) describe culture as social heritage. Culture is so much attached to human life that human beings are often classified as cultural beings. Diverse cultural values lead to varying degrees of satisfaction with counterfeit goods. Studies reveal that such cultural issues like subjective norm, materialism and Social norm as well as value consciousness affect the way people perceive issues including intentions to act in one way or the other.

Subjective norms are a result of the social pressure of friends and family which causes individual motivation to engage or abide by the group behavior. Ajzen & Fishbein (1980) indicated that subjective norm is a critical factor that impacts social influences on behavioral intentions. When consumers offer opinions and positive views toward an item they most likely have a positive purchase intention towards the said items and therefore this subjective norm thinking has a bearing on the purchase intention and ultimate purchase. Jager (2000) argues that pre-purchase ambiguity about counterfeits is influenced by subjective norms.

Materialism on the other hand plays a crucial role in forming people's outlooks towards certain brands. According to Shrum, et al (2013), materialism plays the role in forming the perception people have towards products. Material quests have been known to help to meet the need for uniqueness and belonging, and to compensate for threatened self-esteem since some people believe that material and wealth make them more socially attractive, Jiang et al., (2015). In addition, material wealth can help restore and maintain a sense of stability, identity, control and positive self-image, and is a means of reducing stress Brouskeli & Loumakou, (2014). This image seeking,

materialism oriented endeavors create positive view towards items, and sometimes in cases where the consumers can't afford well-known brands, this translates to demand for counterfeits since such a fake item would still give the force image. Studies by De Lucio & Valero, (2014) have opined that people are strongly influenced by other people's opinions when choosing products,

On issue of morality, Maldonado & Hume (2005) have pronounced that consumers with high morality have unfavorable interpretation while evaluating counterfeit while those with low morality would evaluate the said counterfeits with a more favorable opinion and as such the latter category would have more reason to buy counterfeits. Matos & Ituassu 2007 proved that people's integrity and morality significantly influence consumers' view and inclination towards counterfeit products. Jones (1991) states that the moral intensity is a construct that captures the breadth of issues related to morals which are extremely important in certain situations. In their articles Asiegbu, Powei, & Iruka, (2012) argues that values are common beliefs and cultural norms of what is important or right and that values such as the need to belong or to succeed, represent important objectives to which consumers subscribe to and can affect purchase and consumption decisions.

Value consciousness as a social factor also affects purchase intentions. According to Ang et al., (2001), "Value consciousness is a concern for paying lower prices, subject to some quality constraint, and has been found to have a positive influence on attitude toward piracy." According to Phau & Teah (2009), a consumer's level of value consciousness is related to their propensity of purchasing counterfeit luxury brands, meaning that value-conscious consumers may regard counterfeit products as a better deal than the original status brand.

#### 2.1.3 The Concept of Attitude

In their work, Asiegbu et al., (2012) describe attitude as the mental and neural state of anticipation, organized by experience and expressed as a mental command in such a way as to effect certain reaction in an individual's reaction to the objects and circumstances they interact with. This implies that it has a bearing on a buyer or consumer's perception of a brand, product, person or event and therefore determines readiness of the given consumer to accept an item or not.

According to Huang, Lee, & Ho (2004), "attitude is an instructed tendency to respond to a situation in an advantageous or disadvantageous mode". It describes how a person internally evaluates things or circumstances in light of their views. An individual's intentions are impacted by his or her attitude, which in turn impacts behavior. People utilize their mental states to organize how they view their environment. Additionally, it teaches children how to respond to their environment. An attitude represents the motivations behind a certain action. Consumer attitudes might vary, even in situations involving counterfeiting. Positive attitudes toward counterfeits often translate into purchasing intentions, particularly when combined with additional factors like limited awareness or limited resources.

According to Fishbein & Ajzen 1975, attitudes towards an item are used in research to be indicators of intention especially in matters about counterfeits since they are thought to be stronger predictors of behavior.

Bredahl (2001) suggests that there is a correlation between attitude and purchase intention, saying that cognitive Psychology recognizes attitude as one of the main factors that inform human behavior. Several theories e.g. Theory of Planned Behaviors Ajzen (1991) opines that attitude affects intention to perform a given behavior, while the intentions eventually turn to actual purchase Petty, Unnava, & Stratgman, (1991). The effect of Attitude on human behavior is such that individuals with a positive predisposition towards something would most likely respond favorably to its offer, while individuals with a negative temperament most likely respond negatively Ajzen, (2011).

According to Katz (1960) and Grewal, Mehta, & Kardes (2004), people's attitudes perform four vital roles: The knowledge function, which typically impacts later actions, is a way of organizing ideas about things or activities like branding and shopping. The term "value-expressive function" refers to the process through which attitudes develop and are used to communicate a person's core beliefs and selfconcept. According to classical condition theory, utilitarian function happens when someone develops positive attitudes toward rewarding products and negative attitudes toward other products, whereas ego-defensive function happens when someone develops attitudes to protect their egos and self-image against threats and flaws.

Researchers rely on research criteria to determine consumer attitudes because it is impossible to directly determine attitudes Huang et al., (2004). This is because attitude is an important aspect as it influences customer behavior immediately. According to Fishbein & Ajzen (1975), the attitude of a person is a personal judgment that relies on the points of view of others. Attitudes influence a person's actions by determining their intentions Ajzen & Fishbein, (1980). People employ psychological conditions to build behaviors in order to recognize their surroundings Aaker, Kumar & Day, (1997). A person's attitude toward illegal and unethical goods may be positive. Some consumers view counterfeit goods positively, while others view them negatively (De Matos, Ituassu, & Rossi 2007). It is thought that customers' favorable attitudes toward mimicked items are positively associated with their intentions, especially in the case of luxurious brand imitation goods; however this is a culturally distinctive attitude according to (Phau & Teah 2009). Consumer perceptions about a product or service are a crucial deciding factor in making a successful purchase. Interaction between customers with positive attitudes towards products and high product accessibility leads to a positive buying behavior attitude that leads to a greater purchase intention that translates to greater sales of specific products (Ahmad & Juhdi, 2010).

Consumers are aware that the purchasing habits they possess have a direct effect on a variety of environmental and ecological issues Laroche et al., (1996). Environmental concern is a human trait that can influence one's conduct in a positive or negative way Chan (1996). According to Ajzen & Fishbein (1980) attitudes and beliefs are the terms used to describe these predispositions. An attitude is formed by a set of beliefs that include cognitive and evaluation components (Heerlen, 1981). These attitudes influence how people behave in a variety of situations, including purchasing decisions. The majority of consumer opinions and attitudes of a product is based on their overall evaluation of the product (Solomon, Arndt, Kasser & Sheldom 2004).

According to Fishbein & Janzen (1975), consumer buying behavior is influenced by a buyer's attitude, valuation, and external factors, which is why it's crucial in foreseeing buyer behavior. Purchase intent shows that purchasers would gather information and make a purchasing decision by comparing options using their knowledge, first choice, and external surroundings (Zeithaml, 1996; Yang & Jolly, 2009; Schiffman & Kanuk, (2010). The purposeful purchase of counterfeits, according to (Dodge, Edwards, and Fullerton 1996) and (Fullerton & Punj 1997), is a consumer misbehavior that "violates the generally recognized rules of conduct in exchange for goods." According to Dodge et al. (1996), some qualities or situational circumstances, such as price,

punishment, and aspects that are peculiar to the context, might cause improper conduct on the part of consumers. For example Kattoulas (2002) says that customers may be aware that the items they purchase are not of the same quality as the originals; yet, some of them may be prepared to forgo quality in order to acquire counterfeits that are sold at a cheaper price (Bian & Veloutsou 2005). These customers feel that purchasing fake goods, particularly in the fashion industry, is both enjoyable and worthwhile (Nia & Zaichkowsky, 2000; Eckhart, Belk, & Devinney 2010).

## 2.1.4 Concept of Consumer Knowledge

In order to understand customer behavior, consumer information is an essential component (Klerck & Sweeney, 2007). Subjective knowledge and objective knowledge are the two distinct subtypes of knowledge that may be distinguished. It is the amount of accurate information that is preserved in memory as well as perceptions about a product, and it is described as such (Rao & Sieben 1992). According to Chiou (1998) and (Klerck & Sweeney 2007), a person's subjective knowledge is his or her perception of the amount of information about a product class that is stored in his or her memory, whereas a person's objective knowledge is the actual amount of accurate information that is stored in his or her memory. Subjective knowledge and objective knowledge are two different types of knowledge. The degree to which an individual believes the information they possess to be true is referred to as their "subjective knowledge," whereas an individual's "objective knowledge" refers to their level of real understanding (Chiou, 1998).

Because it is recognized that knowledge about a product may mediate the relationship between attitude and intention, the quantity of information that customers have about a product, whether it subjective or objective, is a significant factor that determines whether or not they would buy that thing (Chico 1998). Consumers with vast knowledge, often known as experts, have a stronger capability for comprehending advertisements (Celsi & Olson, 1988; Ma & Glynn, 2005). As a result, the judgments that these consumers make are likely to be more thoughtful and considered.

Bettman & Park (1980) discovered that consumer product knowledge impacts all stages of the decision-making process as a result of which consumer product knowledge plays a role in the pattern of customer choices and intents.

Consumers with differing degrees of product knowledge have unique perspectives on the quality of the products they purchase (Laroche, Bergeron & Goutaland 2003; Baker, Hunt & Scribner 2002). According to the findings of Marks & Olson (1981), customers who have a greater degree of product knowledge have schemata that are more developed and complicated, as well as choice criteria that have been carefully created. Kempf & Smith (1998) state, on the other hand, that customers who have a greater degree of product knowledge are more capable of diagnosis and are more informed than those customers who have a lower level of product knowledge.

As a consequence of this, a customer's likelihood of developing assessment bias decreases in proportion to the depth of their product knowledge. As a result, consumers who have greater product experience, for instance, have a greater chance of properly evaluating items as a result of their improved cognitive ability. As a direct consequence of this, counterfeit products may be seen as having less appeal to consumers.

Consumer knowledge is perceived to have two major components: familiarity (number of product-related experiences) and expertise (the capacity to successfully do product-related duties) (Jacoby 1986, Alba & Hutchinson 1987). Consumers with high product knowledge tend to delve into the specifics of the message (Roehm & Sternthal 2001), whereas according to (Rao & Monroe 1988) consumers with limited product knowledge rely on the use of peripheral cues as diagnostic signals to examine the risks connected with a particular product purchase.

# **2.2 Theoretical Review**

Theory provides a foundation for methodical knowledge advancement. Several ideas have been proposed to explain the link between social cultural elements, consumer attitudes, and purchase intent. These theories explain Consumer behavior in diverse circumstances and for various goods and services. "A theoretical framework is the use of a group of concepts from a single theory to explain an occurrence or provide light on a research subject," (Fox & Bayat 2007). This research was based on three theories and one model that are often used to describe consumer behavior and buying decisions.

The theories that were: Theory of reasoned action (TRA), Theory of planned behavior (TPB) and Theory of moral reasoning as well as Consumer Choice and Optimal Diversity model (consumer theory) of Jeffrey M. Perloff (2009) The section begins by discussing the TPB, TRA, and TMA.

The theory of planned behavior was used to explain how a person's ability to make independent decisions and self-control influences their desire to buy counterfeits. The Theory of Reasoned Action (TRA) is used to demonstrate how social cultural elements and attitudes influence consumer intentions to buy counterfeit goods. Moral reasoning theory explains the role of morality and integrity in dealing with counterfeits. Consumer theory and the Consumer Choice and Optimal Diversity model were used to investigate consumers' attitudes about counterfeits and to better understand their counterfeit decision-making process.

## 2.2.1 Theory of planned behavior

After developing the idea of reasoned action, Ajzen (1991) went on to construct the notion of planned conduct as an extension of that theory. Because the original model had limits when it came to dealing with tasks over which individuals had only limited volitional control, this modification was essential. TPB is meant to help explain and predict people's intentions and behavior (Ajzen, 2011). This helps to differentiate between inspiring people who are not likely to engage in certain actions of interest but also enables those who already have positive intentions to act on those intentions (Ajzen, 2015), which is the premise of this research.

According to (Chatzisarantis, Hagger, Smith, & Sage, 2006) and Ajzen (1991), the TPB concept states that the best predictor of behavior is an individual's intention, which is a sign of how hard people are willing to work and how much effort they plan to put into doing an activity.

According to Ajzen (1991) and Fusilier & Durlabhji (2005), the theory of planned behavior suggests that attitude, perceived behavioral control, and subjective standards all play a role in determining a person's behavioral intention to participate in a given activity (Fusilier & Durlabhji 2005). Fusilier & Durlabhji's research elucidates that the concept of perceived behavioral control, which is part of TPB, explains the idea of how easy or difficult it is to perform a difficult behavior such as Purchase and consumption of counterfeits.

In this research, the theory of planned behavior was used to explain how social cultural elements and conditions, as well as one's capacity to make their own judgments, influence an individual's purpose to purchase and consume counterfeit goods, especially when such purchase and consumption is a difficult decision.

## 2.2.2 Theory of Reasoned Action

The theory of reasoned action (TRA) was proposed by Ajzen & Fishbein (1980). It posits that People strive to behave in ways that lead to achieving desirable results and meet other peoples' expectations. According to TRA, an individual's intention to do an action (such as buying) is directly related to their decision to do so. Furthermore, if an individual's attitude and subjective norm are known, their intention to perform the activity can be anticipated.

According to the TRA, behavior is the result of the establishment of distinct intentions to behave (Fishbein & Ajzen, 1975; Ajzen & Fishbein, 1980). According to the TRA model, one's intentions to engage in a certain behavior are influenced by one's attitude toward the activity as well as one's own subjective norms. Behavioral intention (BI), attitude (A), and subjective norm (SN) are the three components that make up this theory (SN) and explain that buyer decisions are intentional and well thought out.

The Theory of Reasoned Action (TRA) was used to demonstrate how personal and social factors impact purchasing intentions. Personal elements are those that influence a person's behavior and attitudes, and in this case, they are value, attention, and information. Social factors are the pressures emanating from the society that make one increase or decrease their view and attitude towards a subject for example pressure from a social group to purchase some item.

## **2.2.3 Theory of Moral Competence**

According to Kohlberg (1981), moral competency theory states that consumers' personal activities are founded on a subjective sense of justice. Consumer attitudes, regardless of product class, play a big role in unethical decision making, such as deliberately purchasing counterfeits according to (Wee, Tan & Cheok, 1995), Ang et al., (2001), and Chang, (1998). Wee et al. (1995) found that the likelihood of a

customer purchasing a counterfeit brand increased in direct proportion to the degree to which the consumer held a favorable opinion toward the practice of counterfeiting. If a person has a higher level of moral discernment, they are less likely to condone or take part in activities involving the sale of counterfeit goods. When the moral principles of a person are called into question, the individual's beliefs and attitudes emerge as dependable predictions of how they would respond to the circumstance. When a person is confronted with a moral conundrum, their capacity for moral reasoning is put to the test.

When consumers face an ethical dilemma, TMC presents a scenario in which they must decide if something is right or immoral depending on whether the repercussions are rewarding or punishing according to Phau et al. (2009). Theory Moral Competence is concerned with striking a balance between what is morally acceptable and what is not; it is concerned with moral judgments and decisions. In the case of counterfeit consumption, research has found that a consumer's moral perspective on the practice predicts whether they would buy authentic or counterfeit goods (Swami, Chamorro-Premuzic, & Furnham (2009); Cordell, Wongtada, & Kieschnick, (1996), Harvey & Walls, 2003; Matos et al. 2007; Furnham & Valgeirsson, (2007). Consumers with a higher sense of morality are more inclined to refrain from making such purchases according to Tan, Lyman and Wisner. (2002), Cordell et al. (1996) and Furnham & Valgeirsson, (2007). The theory of moral competence explains how consumers when faced with a choice to buy genuine or counterfeit goods, especially non-deceptive goods, they are faced with a choice to make, whether to buy cheaper counterfeits or insist on the genuine goods. As such the questions of morality and ethics inform the intention to purchase one set of goods or another and are a subject of the current research.

## 2.2.4 Consumer theory, Choice and optimal diversity model

Consumer theory and the consumer choice and optimal diversity model as expounded by (William, Huang & Perloff 2009) are premised on three components. The first component is that consumers have budget constraints or have limited choices, secondly individual tastes determine the total pleasure consumers perceive from the goods they consume and that consumers would maximize their pleasure of consumption by acquiring as much as they possibly can, given their preferences and limitations. According to Perloff et al (2009), Consumers that are price sensitive and choose products that are less expensive and that consideration for best price may make some customers to favor counterfeit goods since they are less expensive than the original.

Consumer preference is a key part of the Consumer Theory and the Consumer Choice and Optimal Diversity model, because consumers prefer certain commodities over others based on their preferences and financial constraints as found by William & Darity, (2008) and Perloff (2009). The "substitution effect" occurs when buyers choose counterfeits to the more expensive, genuine products because of the relatively low price of particular goods (William & Darity 2008). Consumer theory also called the Consumer Choice and Optimal Diversity model was used to explain how benefit maximizing consumers especially in harsh economic conditions have to make a choice on what to buy (Purchase Intention) and sometimes have to buy both deceptive and non-deceptive counterfeits which are a little bit cheaper due to the harsh economic conditions.

## **2.3 Empirical Review**

An empirical review is a method of obtaining information through examination of qualitative and quantitative data from prior research. Several studies have been conducted on consumer attitudes toward counterfeit goods (Salegna & Goodwin 2005).

This section evaluates the postulated social cultural elements that are thought to influence attitudes and, as a result, purchasing intentions.

Despite the fact that counterfeiting has arisen as a major global concern, (Gheorghe & Madar 2008) contend that there is no universally agreed-upon definition of counterfeiting, despite the fact that there are many meanings of the term and the actions closely associated to it.

This even though counterfeiting is now a vital issue in business and countries development. Despite the diverse fields' interest, no single discipline has "taken ownership" of a comprehensive, holistic, strategic approach. Product counterfeiting is an inter-disciplinary research subject rather than a clearly defined academic discipline. As a result, product counterfeiting theory and study are fairly limited, with academics from several disciplines contributing to a body of knowledge that is spread across disciplines.

On the definition of counterfeit, there is minimal agreement in the literature. For example, counterfeiting is defined by the Grocery Manufacturers Association and Kearney as "the unauthorized representation of a registered trademark carried on goods similar to those for which the trademark is registered, with the intent of deceiving the purchaser into believing that he or she is purchasing the original goods" Kearney, (2010). A product does not have to be a registered trademark under law to be considered counterfeit under this definition. This is a divergence from the commonly accepted definition of counterfeiting, which states that a product must be fully or partially registered to be called counterfeit.

### 2.3.1 Social-Cultural Factors and Purchase Intention

There are several aspects that play a role in the decision-making process of customers when it comes to making purchases. These aspects include the qualities of the buyer, psychological factors, social factors, and cultural elements. It is well established that factors such as culture, subculture, and socioeconomic class each play a significant role in shaping consumer behavior. According to Kotler (2001), culture is the most basic factor that determines a person's aspirations and behavior. This perspective is supported by the findings of this researcher. Rani (2014), identifies cultural, social, personal, and psychological factors as the four major influences on consumer's buying behavior, adding that these factors cause consumers to develop product and brand preferences

Schaefer, (2006) defines a Society as a fairly large number of people who live in a specific community and are relatively independent of the people outside it and usually participate in a common culture. A society is the largest form of human grouping and it consist of people who share a common heritage and culture, members of the society learn this culture through the process of socialization and transmit it from one generation to the next (Broom & Selznick, 1968) cited in (Olatunji & Armstrong 2009). Within a society, human being as species is best described as a social being because humans live their lives in the company of other humans.

Culture and society are two inter-dependent terms and both have profound impacts upon individual behavior. Milner (1994) sees culture as fundamental to any social system; the cultural orientation of a society reflects the complex interaction of values, attitudes and behaviors displayed by its members (Schaefer 2006). These values, in turn, affect the attitudes of individuals, which form their behavior choices in any given situation, including purchasing. The interaction of social and culture forms social cultural factors. The socio-cultural system is the basic determinant of behavior, in the same vein; the socio-cultural system is the basic determinant of entrepreneurial behavior (Gamage 2003; Yonkers, 2003; Abimbola, 2007). The aforesaid suggests that socio-cultural variables are important factors influencing purchase behavior.

Human behaviors generally are functions of specific socio-cultural systems whereby cultural factors dictate individual behavior (Hofstede 1990; 2001). Socio-cultural factors have a substantial influence on human behavior. Technically, Purchase and consumption, entrepreneurial behaviors cannot be separated from its social and cultural contexts, because the world is channeled through a well-integrated socio-cultural system in which the value system becomes the crucial determinant of an individual's actions (Gamage 2003).

Zaid, Jaaronb & Talib (2018) investigated the impact of customers' sociocultural factors on their online shopping behavior in Saudi Arabia and discovered that customers' sociocultural factors have a significant impact on online shopping behavior, while (Nam, Dong, & Lee, 2017) in a study called factors that influence consumer purchase intention of green sportswear found that expectation, perception, subjective norm, & attitude had a significant impact on consumers' intentions to buy green sportswear.

De Matos et al. (2007) conducted a study with 400 Brazilian customers and discovered that the presence of social elements such as subjective norm influences the decision to purchase. Consumers who follow positive norms are likely to reject counterfeits because they are thought to be incompatible with societal values, but those who follow negative norms are more likely to acquire counterfeits. The study

discovered that Attitude can be used as a mediator in determining the relationship between antecedents and purchasing intentions.

#### 2.3.1.1 Materialism

Materialism, according to Belk (1985), is a personality trait that differentiates between those who see belongings as very important to their identities and lives and those who regard belongings as secondary. Materialism is "a set of centrally held beliefs about the importance of possessions in one's life", emphasizing the importance attached to material objects (Richins & Dowson, 1992). The authors argued that materialism had an impact on attitude towards purchasing and consumption and specifically, materialism can influence such areas as the type, quality and quantity of goods /services purchased since materialistic buyers get utility from the value the bought goods bring to them in the eyes of others. This pursuit of value especially perception value can lead buyers to buy cheap but fairly quality counterfeits.

Belk (1985) conducted a survey of 338 people in the United States to determine personality traits related to living in the material world. The findings revealed that possessions play an important role in materialistic consumers' lives because they are linked to personal satisfaction, pleasure, and happiness, and thus their attitude toward goods and services is influenced by the value they bring to the buyer in terms of impressing others.

Yoon (2011) investigated changes in Korean lifestyle and concluded that the proliferation of materialism among Koreans, particularly younger generations, was on the rise, and that Koreans were increasingly viewing money as a symbol of success and valuing luxury brands that they could flaunt to others, which is a result of materialism under the influence of a global consumer culture.. The Researchers

concluded this thirst to show off; materialism among Koreans encourages them to purchase goods that help them to show off.

The purpose of the research carried out by (Eastman, Fredenberger, Campbell, & Calvert 1997) on the Relationship between Status Consumption and Materialism in a Cross-Cultural Comparison of Chinese, Mexican, and American Students was to determine whether or not materialism has the same influence on attitudes throughout different cultures. A total of 800 undergraduate students from these three countries were selected at random from three convenience samples of students: 254 from the United States of America, 311 from China and 235 from Mexico. The purpose of this research was to examine the degree to which students in these countries are materialistic. The research revealed that culture has a significant role in the development of materialism and status symbol apparel, with Mexicans being less materialistic than the others.

Lundstrom (2017) conducted an experiment in which they asked American and French master of business administration (MBA) students, as well as their parents, to fill out questionnaires on their feelings toward material possessions. An empirical research was carried out on consumers in both France and the United States of America with the purpose of determining whether or not there were any intergenerational or cultural variations in the level of materialism across the generations and cultures. They came to the conclusion that the level of enjoyment derived from possessions and materialism varies dramatically across generations both within and between countries.

Parker, Hermans & Schaefer (2004) examined respondents from Japan, China, and the United States in order to investigate similarities and differences in materialism among 14- to 17-year-olds in China, Japan, and the USA and to determine whether materialism had an effect on attitude, and consequently, purchase. The poll showed that young people in China are less concerned with acquiring material goods than their equivalents in either Japan or the United States. The results of the study showed that adolescents in the United States are the most concerned with acquiring material goods. Their perspective on material possessions was far more positive than that of the other nations'. These results do not align with previous studies, which had shown that individuals and countries with lower incomes had a tendency to be more materialistic; hence the need for more study.

Ang, et al (2001), in their research to establish the demand side of counterfeits, conducted examinations among one hundred people in two different settings in the United States: a shopping mall and an open market. According to the findings, consumers who place a high value on material possessions had a favorable attitude toward the purchase of imitation goods because they believed that the possession of items carrying famous brand names, symbols, and pictures would grant them the same prestige, social status, class, and picture of success that are ascribed to the genuine product.

## 2.3.1.2 Moral intensity

Jones (1991) defines moral intensity as the magnitude of a situation's issue-related moral necessity. Consumer ethics and morals are major determinants of attitude toward counterfeit items, according to various studies (Swami et al., 2009; Maldonado, 2005; De Matos, 2007; Cordell et al., 1996; Ang et al., 2001). Moral judgment is important in the procurement of counterfeits, according to (De Lucio & Valero 2014), and it weighs more than personal attributes or product aspects. (Singhapakdi, Vitell & Franke 1999) undertook a cross-cultural study of consumer

perceptions of marketing ethics and came to the conclusion that moral intensity and consumerism vary by cultural context and are situation specific, necessitating continued research in diverse settings.

In decision-making, the Moral Intensity construct combines the concepts of integrity and ethics. Tan et al (2002) proposed and partially supported the idea that moral intensity has a detrimental impact on the propensity to buy pirated software. Following in this vein, (Muncy & Vitell 1992) investigated consumer ethical judgments and attitudes towards governments, businesses, and the public by examining ethical opinions among consumers across a wide spectrum of the population. Consumer judgments concerning a variety of ethical situations were explored, as well as the relationship between these aspects and selected attitudinal variables. A sample consisting of 1900 heads of households within the United States was chosen for the survey. The study concluded that consumers tended to believe that benefiting actively from an illegal activity was more unethical than benefiting passively and they were not wrong if they did not commence the counterfeiting activities.

Using a sample of 400 customers, Tan C et al (2002) investigated the effect of consumers' moral intensity, perceived dangers, and moral judgment on their desire to acquire pirated software. Conclusion: When customers have a high level of magnitude and concern for Consequences and Social Consensus (sub-constructs of moral intensity), they are less likely to buy stolen software. They came to the conclusion that consumers with a higher moral intensity were less likely to buy pirated software, and that moral intensity influenced the purchase of pirated software and other illegal goods.

Ang et. al., (2001) carried out a survey called "Spot the difference: consumer responses towards counterfeits among 3,621 Singaporeans, aged 15 and above who had bought a Compact disk (CD) before." The results reveal that these customers did not believe purchasing counterfeit CDs was as dangerous or wrong. Consumers, both purchasers and buyers, did not think it was unethical for people to buy counterfeits. As a result, they didn't think there was anything wrong with purchasing such items.

Based on a field survey in Taiwan (Chiou, Huang, & Lee 2005) evaluated the antecedents of consumer attitude and behavioral intention regarding music piracy behavior. They sampled 361 students aged between 15 and 18 years. The results showed that moral intensity negatively affects attitudes towards buying unauthorized music downloads/duplication. It also revealed that music pirate behaviors have a high level of relationship with the seriousness of the ethical consequences. If customers comprehend the seriousness of the situation, they would be less likely to engage in music piracy.

Lau (2006) carried out a market survey among 309 students in various disciplines to find the factors motivating people toward pirated software in the Asian market and found that most felt software piracy was acceptable. When an individual is given the option of acquiring or using pirated software, for example, he or she must decide whether or not to do so. The research results concluded that individuals facing an ethical problem must make a behavioral decision on purchasing during the ethical decision-making process. This decision is taken based on an individual's view of morality and informs any consumer's attitude towards pirated goods.

## 2.3.1.3 Subjective norm

Subjective norms are defined by (Ajzen & Fishbein 1975) as a person's impression of social normative forces or the opinion of others on a particular conduct. According to Albers-Miller (1999), the risk of acquiring counterfeits increases when someone believes their significant others consent to the purchase of counterfeits, a scenario known as subjective norm. According to Ajzen (1991) subjective norms refer to perceived societal pressures to participate in or abstain from a particular behavior. Subjective norms indicate people's expectations of how they would be seen by their reference groups if they engage in particular actions.

According (Lu, Wan-Ju, & Chen 2016), social influence (SI) is the same as a subjective norm and is defined as an individual's belief regarding whether or not significant others believe that they should engage in the activity. In both TRA and TPB, subjective norms are investigated as a key driver of intention to behave one way or the other.

According to previous studies, attitude is greatly influenced by subjective norms. In their studies, (Tarkiainen & Sundqvist, 2005; Shimp & Kavas 1984; Vallerand, Pelletier, Blais, Briere & Senecal, 1992, and Chang (1998) found a significant causal link between subjective norms and behavior-inducing attitudes (buying intention).

Yoo & Lee (2009) looked at the impact of three groups of variables (materialism, future social standing perception, and self-image) on purchase intention of luxury fashion designer brands and their counterfeits among Korean students in their research: The findings of the study, which comprised 324 Korean female students, revealed that variables such as social pressure were drivers of counterfeit purchasing intent.

Kalafatis Pollard, East, & Tsogas, (1999) studied purchasing intentions toward environmentally friendly products in the UK and Greece. The surveys were carried out in the London area of the UK and the Athens area of Greece and respectively resulted in 175 and 170 usable replies. The results in the UK sample showed that social norms (SN) had a significant direct effect on intention and that social influence was the most impactful factor in determining purchase intention among the UK respondents.

Dean, Raats, & Shepherd (2008) carried out a study to measure if emotional attitudes measures of positive and negative morals could be integrated into the Theory of Planned Behavior in terms of organic food choice and to evaluate their relative contributions to predict intention to purchase both fresh and processed organic foods. The study was carried out in the UK and 281 members of the public completed the questionnaires for the study. The results showed the importance of subject norms to consumer's intention to purchase organic food products. Positive moral norm was shown to have an independent contribution route to attitude for both fresh and processed organic products while negative norm contributed to the attitudes towards processed organic produce but not for fresh organic produce.

Through a survey of 295 clients, (Chiu & Leng 2016) used the Theory of Planned Behavior to compare the purchase intentions of counterfeit sporting items between Singaporean and Taiwanese students (168 Taiwanese and 127 Singaporeans). The findings revealed that in both countries, consumers' subjective norms and brand consciousness were predictive of purchase intent. Further research revealed that Singapore students had considerably more favorable attitudes toward the buying of counterfeit sporting items, as well as higher levels of peer approval. Nam, Dong & Lee, (2017) investigated the effects of customers' anticipation, perception, subjective norm, perceived behavior control, and attitude on purchasing green sportswear. They performed an online poll with a convenience sample of US customers aged 18 to 74 years old from around the country. Expectation, perception, subjective norm, and attitude all had substantial effects on customers' purchase intentions for green sportswear, according to the results of 542 usable replies.

Lin & Huang (2012) validated the consumer susceptibility to interpersonal influence (SUSCEP) scale by surveying 1114 adult employees and 350 university students in China. Results showed that the consumers were vulnerable to interpersonal influence in their purchase decisions and that social pressure and the concern of what others would say affected buyers attitudes towards goods.

# 2.3.1.4 Value Consciousness

Value consciousness, as defined by (Lichtenstein, Donald. Richard, Niemeyer, & Burton 1989), is "a concern for paying cheap prices, subject to some quality constraint," and is separate from coupon/offer proneness. Value consciousness, according to Ang et al. (2001), is a desire to pay lower prices under certain quality limits, and it has been shown to have a positive impact on attitudes toward piracy. (Egol, Clyde, Rangan & Sanderson 2010) notes that "A new frugality, characterized by a strong value consciousness that dictates trade-offs in price, brand, and convenience, has become the dominant mind-set among consumers in the United States." (Phau & Teah (2009) discovered a link between a consumer's level of value consciousness and their proclivity for purchasing counterfeit luxury brands, showing that value-conscious consumers may consider counterfeit products to be a better deal than the genuine article.

According to Kattoulas (2002), counterfeits are poor imitations of genuine products, however even while customers may know that counterfeits are inferior to the originals, some people may be prepared to sacrifice quality in exchange for a lower price. Such consumers trust that counterfeits, particularly fashion counterfeits, are entertaining and valuable according to (Nia & Zaichkowsky 2000) and Eckhart et al. (2010). For example (Phau, Prendergast, & Chuen, 2001) reports that more than a third of consumers buy counterfeits aware of such a situation because the product is more affordable as a result of the lower price while Gentry et al., (2001) reports that the sales of counterfeit are on the increase, a clear indication that some consumers find some value in the counterfeits.

## 2.3.2 Consumer Attitude and Purchase Intention

Consumers believe that their purchasing behavior has a direct impact on many environmental and social problems (Laroche, Toffoli, Kim & Muller, 1996). This concern for external environmental issues represents the preferences and human choices that influence their behavior in a positive or negative way (Chan, 1996). Attitudes and beliefs are common terms for these predispositions (Ajzen & Fishbein, 1980). According to (Heberlein & Black 1981), a series of beliefs about a target combined with cognitive or evaluation creates an attitude toward a product or its packaging, whereas (Ajzen, 1988) and (Ajzen & Fishbein 1980) explain the relationship between attitude, intention, and behavior, implying that people normally act in accordance with their intentions. Studies have shown that people act in accordance with their attitudes so long as the attitudes are because of personal experience, one is expecting a favorable outcome or where the model is attractive, popular or successful (Zimmerman, 2009). People's attitudes are influenced by their past behavior, according to (Albarracin & McNatt, 2005). Ajzen and Fishbone (1977) performed a review of 109 papers on the relation between attitudes and behaviors. The review disclosed that attitudes are good predictors of behaviors when the specific elements of attitudes and behaviors match.

Swinyard et al., (1990) carried out a cross sectional study to check the morality of software piracy in Singapore and to compare the issue of Piracy between Singaporeans and Americans. The results showed that Singaporeans, who oppose software copyright legislation, are more likely than their US counterparts to make pirated copies of software. The findings revealed differences in moral values between the two groups, with the US group being more influenced by the legality of the act of copying, while the Singaporeans were more concerned with the impact of outcomes. They proposed that the cultural differences between the west and the east are a major reason for differences in counterfeit consumption levels.

Hustvedt & Dickson (2009) carried an investigation to study the influence of attitudes on consumer likelihood to purchase cotton apparel among 422 United States consumers and concluded that attitude is an important predictor of purchase intention while Nordin (2009) conducted a survey of 270 Malaysian consumers to understand their attitudes toward counterfeit products and concluded that attitudes toward counterfeit products are significant in influencing purchase intention.

Han (2014) undertook a study to understand the effects of Social Norms and Knowledge on Socially Responsible Consumer Attitudes in various sectors in the United States of America and found a strong positive association between attitude and purchase intention.

Yeon & Murat (2016) looked into how attitudes, subjective norms, perceived behavioral control, and moral norms affected buying local food in the US. Structural

equation modeling was performed on a sample of 695 US consumers. The final analysis indicated that an attitude toward buying local food was the biggest antecedent to purchase intention.

A study by Mostafa (2007) tested the issue of green purchase intention among Egyptian consumers, investigating the influence of three cognitive and attitudinal factors on gender differences in green purchase behavior using a sample of 1093 developed and administered across Egypt. The findings confirmed the influence of consumers' ecological knowledge, concern and attitude on gender differences in green purchase behavior.

Follows & Jobber (2000) undertook a research aimed at determining the effect of knowledge, attitudes on purchase intention on purchase behavior. The study was carried out through online questionnaires sent out and received back from 339 respondents in Jakarta and Bekasi. The research concluded that there is significant influence of Environment Knowledge, Environment Concern and Attitude on green purchase Behavior in Indonesia.

Cordell & Wongtada (1991) studied the relation between Consumers' willingness to buy counterfeit and attitudes toward legality. The study was done among 221 students through a survey method. When students were offered the option of choosing between counterfeit and authentic goods, they preferred the counterfeit regardless of legality or public welfare.

Ahmad & Juhdi (2010) carried out a study on consumers' intention to purchase organic food products in Malaysia. A total of 177 respondents were generated in which it was found that engagement between consumers with positive attitudes towards high market share and products create a favorable attitude towards product

resulting in a stronger intention to purchase, indicating that attitude of consumers toward a product is a significant determinant of a positive purchase decision.

Xudong, Zheng & Therese (2013) went to research whether or not the reasons consumers in emerging nations like China and Brazil choose organic food are culturally dictated or whether or not they are determined by important product qualities. They found that consumers' attitudes toward purchasing organic food are strongly linked to beliefs about the food's healthiness, taste, and environmental friendliness; however, consumers' attitudes varied due to differences based on demographic factors such as age, gender, and income.

Although most studies give overwhelming research evidence and numerous industry reports on the negative beliefs about counterfeit brands, some studies recently have identified some positive beliefs and attitudes. According to (Tom, Garibaldi, Zeng, & Pilcher 1998), some buyers feel counterfeited goods are of the same quality as legitimately created goods, and that purchasing counterfeits helps new manufacturers demonstrate their ingenuity by simply responding to market demand.

Ying, Wang & Yiping (2013) investigated the impact of counterfeit luxury products on Chinese customers of various degrees of luxury to explore how their consumption experiences influence their opinions of counterfeit luxury products.

They discovered that consumer perceptions and attitudes are influenced by culture, and that future research into people's views about counterfeiting in a cross-cultural environment might be advantageous. They suggested that future study may include additional relevant components like motivation and purchasing intent to have a better understanding of the customer decision-making process in this area. According to Yeon & Murat (2016), attitude has the greatest influence on the desire to buy local food goods, but subjective norms, perceived behavioral control (PBC), and moral norms all play a role.

But because of the low response rate, the research cannot be extended to the broader US population or other situations. Consequently Amy Faria conducted a study in 2013 on the attitudes of Chinese and Canadian customers about counterfeit goods, focusing on counterfeit designer apparel. As a result of this research, it was observed that although Chinese and Canadian focus group members had different indicators, there was a significant difference in views and buying patterns between these two groups with the Chinese focus group showing more inclination towards counterfeits.

#### 2.3.2.1 Attitude as a mediator

Ajzen's (2005) defines attitude as a "disposition to respond favorably or unfavorably to an object, institution or event" and this view has been frequently used to explain human behaviors (Zimbardo, Ebbesen, & Maslach, 1977). However, numerous studies have found attitude to be a very poor predictor of actual behavior (Wicker, 1969) but rather it mediates the relationship between perceived usefulness and perceived ease of use in one hand and behavioral intention in other hand. Attitude has an important direct influence on intention purchase and is therefore a mediator in the relationship between Social Cultural Factors and Purchase Intention.

Ang, Ramayah & Amin (2015) used attitude as a mediator between social factors and perceived behavior in studying the efficacy of the theory of planned behavior in the context of hiring Malaysians with disabilities. In the study, instead of viewing behavioral intention as only a function of the conceptualized independent variables, a modified TPB model used the attitudes construct as an antecedent of the dependent variable, as a mediator in the independent variable-intention equation. A study on consumer organic-food purchasing by (Tarkiainen & Sundqvist 2005) revealed that about 56% of the variance in consumer intentions to buy organic food is accounted for by their attitude, acting as a mediator between subjective norms and buying intention through attitude formation.

# 2.3.3 Consumer Knowledge and Purchase Intention

Bieha & Chakravarti (1983) investigated the impact of terminologies on attitudes about advertisements and brands among Chinese consumers, using consumer product knowledge as a moderator, and discovered that consumers make decisions after gathering information. A total of 121 students participated in the research. They found that consumers with low product knowledge form more favorable attitudes towards brands advertising and products but the ones with more product knowledge hardly make differentially favorable attitudes towards advertisements. They pointed out that different kinds of information are remembered based on distinct decision-making tendencies.

Younus, Rasheed, & Zia, (2015) studied factors affecting Purchase intention in Pakistan. They carried studies among 100 citizens and the regression results show that there is a strong relationship between the customer knowledge and purchase intention with a Beta of .269 which indicates the level of variation in the dependent variable as the independent variable changes.

Rao & Monroe (1988) examined the use of product information cues in product evaluation to differentiate familiar subjects especially cues on price and intrinsic product to assess product quality. They discovered that product knowledge influences how consumers evaluate products, and that consumers with differing levels of product knowledge respond to commercials differently. In analyzing the risks associated with a product purchase, customers with less product knowledge were found to rely more on peripheral cues as diagnostic signs (Rao & Monroe 1988).

A study conducted by Dipayan, Abhijit & Das (2006) looked at consumer knowledge, perceived congruence, and product technology orientation. Researchers discovered that when it comes to high-tech items, consumers who are familiar with the product are more receptive to endorsements from people they regard as experts in the field than those who are unfamiliar with the subject matter.

Despite numerous studies on the influence of consumer product knowledge on purchase intent, (Maheswaran & Sternthal, 1990) and (Rao & Monroe, 1988), claim that the mediating effect of consumer product knowledge on mobile phone purchase intention has received little attention and therefore warrants further research.

#### **2.3.3.1** Consumer knowledge as a moderator

In the current research, prior knowledge was used to designate consumers' beliefs about the product's advantages or disadvantages relative to other products (Alba & Marmorstein, 1987). Such prior knowledge may matter more than the product's absolute performance in consumer decision making (Keiningham, et al., 2015). Research has shown that even after forming a purchase intention, consumers keep reevaluating their target basket of purchase for the current and future purchase (Belk 1985). Consumer Knowledge acts as a moderator since consumers normally have some information and beliefs about a product but their information reprocessing may be conducted in a confirmatory manner (Fischer, Greitemeyer & Frey, 2008) and thus affects the levels purchase intention. Sun, Zheng, Su & Keller (2017) found consumer knowledge, especially prior knowledge moderates the Purchase Intention behavior divergence of foreign versus domestic brands in emerging markets

# 2.3.4 Purchase Intention and Purchase behavior

According to Ajzen (1985), purchase intention is an individual's willingness to acquire a product that is predicted by that person's attitude toward the action, subjective norm, and perceived behavioral control. The idea of behavioral intention is based on the notion that a person's decision to participate in a certain activity would only be successful to the degree that they have full control over their actions. This is the cornerstone of the theory that underpins behavioral intention (Fishbein & Ajzen, 1975). This is in line with Ajzen (2011) and (Kautonen, Van Gelderen & Tornikoski, 2013) who argues that intention is highly predictive of future behavior which is formed by a number of beliefs representing the perceptions that people have about a behavior including its likely consequences, the normative expectations of others, and the likely barriers of performing a particular behavior. Montano & Kasprzyk (2015) argue that the effect of behavioral intention is the most significant determinant of behavior.

According to (Fishbein & Ajzen 1980), the choice to do something or the mental state that communicates the perspective of humans as participants and their conduct constitutes what is commonly referred to as "intent to purchase" as articulated in the Theory of Planned Behavior (TPB). Intention to purchase is used to compute purchasing behavior, whereas intention to purchase is measured based on the posture of customers using the principle of reasonable process. Buying behavior is determined by the amount of money consumers intend to spend on a product (TRA). Intention is the most important component to consider when analyzing the shopping patterns of customers. There is a connection between attitude, behavioral intention, and actual conduct, as stated by the theory of reasoned action (TRA) and its extension, the theory of planned behavior (TPB) (Ajzen, 2011). The intention to make a purchase is an important aspect in predicting customer behavior (Fishbein & Ajzen, 1975). According to Follows & Jobber's (2000) research, a consumer's intentions an serve as a good indicator for their real purchase conduct.

Phau et al. (2009) suggest using the concept of willingness to purchase as a stand-in for purchase intention. Additionally, willingness to purchase should be seen as an indication of actual purchase behavior. As a consequence of this, a consumer's readiness to acquire a specific product is a reliable indicator of that consumer's subsequent purchase of that product. As a result of this, Phau et al. (2009) think that the desire to purchase ought to be seen as the same thing as an actual purchase.

Laroche & Sadokierski, (1994) interviewed 178 high-income adults in the USA regarding their selection process and intention to buy an investment plan and the results revealed that both attitude and confidence variables appear to significantly explain intention to select an investment firm while the intent more often than not translated to final purchase.

Maichum, Parichatnon & Peng (2016) investigated the factors that influence the purchasing intention for green products of young Thai consumers. An expanded framework of the theory of planned behavior was used to examine Thai customers over the age of 18 with a basic high school education on their purchase intentions for green products (TPB). The data was gathered from 483 people in Thailand. To conclude, the study found that green product purchase intentions are positively

influenced by consumers' attitudes, subjective norms, and perceptions of behavioral control.

Using the idea of "willingness to pay," market researchers, psychologists, and economists (Wertenbroch & Skiera, 2001) estimate demand for private and public goods and devise optimal pricing schedules (Wertenbroch & Skiera, 2001). As is usual in attitude models, the desire to acquire knockoffs was used as a surrogate for future behavior (Fishbein & Ajzen 1975). In the situation of customers weighing the costs and advantages of a fake product over a genuine product, there is no reason to believe that they would be any different from consumers weighing the costs and benefits of a genuine product (Ang et al. 2001; Bloch, Bush & Campbell 1993). In the study the propensity to purchase construct in the model was linked to the tendency of a person to acquire counterfeit items.

## 2.4 Summary of Literature and Research Gaps

This section examined the disparities in social cultural elements and consumer attitudes toward buying intention around the world, but also in Africa and Kenya. The available empirical research clearly demonstrates that some research on social cultural factors and attitude toward counterfeit purchase intention has been conducted, but mostly in the Western world, including studies on various aspects of attitude and their role in inspiring customer purchase intention.

Most research on attitudes has pointed to the fact that attitude plays a crucial role in determining the purchase intention of counterfeit goods hence may determine level of demand for the goods since literature has shown that Purchase intention is a surrogate for actual purchase. However, there has not been a consistent finding towards counterfeits. Literature confirms that study of the counterfeit threat should start from

determining factors that inform attitudes and purchase intentions since control of such factors may eventually lead to change of consumer behavior towards counterfeits.

Bearing in mind various variables that play a role in determining social cultural factors and consumer attitude, the empirical literature stresses the need for more understanding on the effect of these variables in consumer purchase behavior which has not been exhausted especially since some of the Social Cultural Factors and attitude itself are dependent on context. SCF has a negative impact on students' views toward counterfeiting in Kenya because of cultural factors such as morality intensity, materialism, and the influence of subjective norms on customer perceptions and intentions to acquire counterfeit goods.

Qualitative study should investigate why counterfeits are acquired and gain meaningful answers for the buyer's underlying reasons when purchasing counterfeit items, according to (Hoe, Hogg, & Hart 2003). Most studies have concentrated on the supply side which indicates concentration on the factors that motivate traders and middlemen to act one way or the other towards the vice. Consumers' opinions against counterfeits were the main point of this study examining why they continue to buy such products despite all efforts curtail the behavior.

The literature research in table 2.1 below revealed that many empirical studies on the subject had been conducted outside of Kenya, indicating a need for a study in the Kenyan and African setting to supplement the literature with information from Kenyan experiences.

 Table 2.1 Studies done In the Area and Study Gaps

Author, researcher	Study descriptors (method, participants) and product)	Findings	Research Gap/ Focus of current study
Albers-Miller 1999	Survey, 92 U.S. students (potential buyers of counterfeits) color TV	Selling price and the presence of friends enhances willingness to buy a counterfeit.	The variables used in this research study (price, friends, and criminality). There is a gap on the other factors that may affect attitudes towards counterfeit consumption. This study introduces new factors
Ang et al. 2001	Survey, 3251 Singaporean consumers Music CD	Positive correlation between attitude/purchase intentions. Attitude is affected by normative susceptibility, integrity and personal income on attitude towards piracy;	The study focused on only one product category and in only one context, Singapore. There is a gap in terms of a different product line and the context. This study extends the study to an African context
Moores & Chang 2006	Survey, 243 students from Hong-Kong software	Moral intentions reduce buying behavior. The relationship between buying and using behavior is stronger amongst men than women	Study focused on only one category of product (software) and focused on students from only one area. The current extends the study to Africa and introduces new variables
Rizwan M et al 2006	Survey of 329 Pakistan students Mobile Phones	Influence of experience and low price on attitude towards counterfeit mobile phones. Positive association between experience, peer pressure and attitude towards counterfeit mobile	Study conducted in only one university. There is a need to extend the survey to other universities since consumption is culture specific. This study extends the study to an Africa setting.

Celso Augusto de Matos et al 2007	400 Brazil consumers.	Identified the relative importance of antecedents in predicting attitudes which was treated as a mediator.	Study was based in Brazil and should be extended to new contexts, which is what the current study does besides introducing a moderator on the mediator.
Muthiani et al 2011	61 pharmacies	Profit pressure, consumer demand, and irregular supply increase trader's appetite for counterfeits.	The study concentrated on the traders to understand their motives for selling counterfeit, a gap exists in the side of the buyers. The current study has consumers as the respondents.
Tan et al 2002 survey,	377 Chinese consumers	Demographics, price, purchase experience with pirated/ copyrighted software, moral intensity, perceived risks, moral judgment have influence on attitude towards counterfeits	Since this was done among Chinese consumers there is a gap in African culture, which the current study fills.
Yoo & Lee 2009	Experiment with 2 groups of Koreans (420 and 500)	consumers prefer genuine items over counterfeits, regardless of their product experiences;	The methodology used was experiment. The current used different methodology, survey to bring new learning

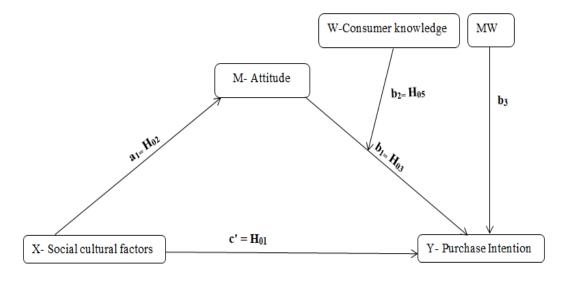
Muthiani et al (2011) endeavored to broaden the perspective by investigating the elements that influence the entrance of counterfeit pharmaceuticals in Small Micro Enterprises (SMEs), with a particular focus on regulation, brand equity, pricing strategy, and perceived dangers. The current study focused on fast-moving consumer goods specifically mobile phones, and so filled a vacuum in the knowledge of counterfeit consumer goods purchase intentions in Kenya.

## **2.5 Conceptual Framework**

A conceptual framework is a graphical representation of the variables in a study's theorized interrelationships (Odhiambo & Waiganjo, 2014). This is depicted by the hypothesized model in figure 2.1 linking social cultural factors and purchase intention through attitude with conditioning by consumer knowledge. A conceptual framework, according to Imenda (2014), is the outcome of combining numerous linked concepts to explain a specific occurrence and provide a more comprehensive understanding of the study subject. In academic studies, the conceptualization of variables is critical since it serves as the foundation for testing hypotheses and making conclusions from the findings (Dwi, 2011).

The conceptual framework below depicts the link between Independent and Dependent Variables. The Independent variable is Social cultural Factors represented by its sub constructs namely materialism, subjective norm, moral intensity and value consciousness. These are the factors that inform intention to purchase counterfeit goods. Attitude is the mediating variable in the study while consumer knowledge is the moderating variable. The model builds and expands theory and knowledge by incorporating the concepts of attitude as a meditator and consumer knowledge as a moderator of the mediated effect. The operationalization of the variables is shown in figure 2.1 below.

Moderated mediation effect of the relation between social cultural factors and purchase intention of counterfeits through attitude by consumer knowledge



Control variables; age, gender, marital status

# Mediation: $H_{04} = a_1 * b_1$ Moderated mediation: $H_{06} = a_1 * (b_1 + (MW))$

## **Figure 2.1: Conceptual Framework**

Source: Process model 14, moderated mediation, adapted from Hayes process macro

The conceptual framework also outlines the sub variables examined in each variable, which are the measures used to reject or fail to reject the hypothesis in the questionnaire. The independent variable was represented by its sub components (Materialism, Moral Intensity, Subjective Norm and Value consciousness). The factors in each sub construct include admiration of world possessions and the need to impress others (materialism), the amount of pressure one feels from friends and family (subjective norm), the degree of integrity and self-control one has when making decisions (moral intensity), and the degree to which consumers are concerned with getting the best value for their money (value consciousness). The dependent variable was Purchase intention which was operationalized as overt and covert indications that one would buy or doesn't mind counterfeit goods, and was taken as

surrogate for actual purchase. The mediating variable was consumer attitude, which is the view one has about an item while the moderating variable is consumer knowledge, which is how much an expert one is about the goods in consideration and whether one's expert opinion can be sought to help others in purchasing. Mediation primarily requires that there exists a positive relation between SCF and Purchase Intention and also a positive relation between attitude and Purchase Intention, with the total effect of SCF on Purchase Intention built by and through attitude.

The study sought to prove that there is both a direct and indirect (through attitude) relationship between SCF and PI. This is consistent with studies by Aaker et al (1997) who opine that positive brand attitude and brand image act as mediators and enhance the brand equity. It is also in synch with a research by Lutz, MacKenzie, & Belch (1986) which explains that attitude works as a filter for an individual perception for an object. This filtration is mediation, which is what the current study sought to emphasize.

The relationship between Social cultural factors (Materialism, Moral intensity Subjective norm, Value consciousness), and Purchase Intention is shown by  $H_{01}$ . The direct effect between the IV and Mediator is shown by  $H_{02}$  while the unconditioned effect of the mediator on DV is shown by  $H_{03}$ . The mediated relationship between Consumer Attitude and Purchase Intention is shown by  $H_{04}$  while the moderation by consumer knowledge is shown by  $H_{05}$ . The moderated mediation effect is depicted by  $H_{06.}$ . The study also checks the effect of control factors in the relationship of the theories. The study checks and tests the effect of gender, age and marital status in all the relationships of variables and also if the extraneous variables have any effect on the strength or direction of the direct and indirect relationships. The three control variables were regressed against the independent variables to see if they affect the final results in any way. Age refers to the various cohorts and tested if an age group or cohort had effects on Purchase Intention while marital status sought to check if a respondent was single, married or divorced and if that status had any effect on purchase intentions. Finally, the study investigated if gender (Male or Female) had effect on final results

## 2.6 Conceptual Gaps in Literature Reviewed

This section examined the global, African, and Kenyan gaps in social cultural determinants and consumer attitudes regarding buying intention. Many scholars had done studies on various parts of social cultural determinants and attitudes about counterfeit purchasing intention and their involvement in influencing consumer purchase intention, according to the existing empirical study. A positive correlation between social cultural factors and purchase intention has not been found in all prior studies, particularly the mediating effects of attitude on the relationship between SCF and Purchase Intention. Where such a relationship has been found, the researcher was unaware of any research on the moderating effects of consumer knowledge. There was also a dearth of research on how consumer knowledge influences the strength of the relationship between attitudes and purchase intentions.

While much empirical research has been conducted outside Kenya about this subject matter, little attention has been paid to the influence of consumer knowledge on the relationship between attitudes toward a product and a person's desire to acquire it.

Because of this, the study needed to focus on Kenya and especially on the moderating effects of consumer knowledge on the effect of attitude on purchases intention of counterfeits with an African setting in order to add to literature with data from Kenyan experiences.

Besides, most research has concentrated on ways to manage counterfeits on the supply side; few have looked into the demand side and the factors that influence the rising influx of counterfeit pharmaceuticals (Albers, 1999). Three such variables were noted by Opiyo (2006): a poor legal framework, customers' attitudes toward counterfeit medicines, and higher prices imposed on imported drugs which in the view of the researcher left a wide gap in the context of other types of goods given that most medicine in Kenya are controlled by ethical standards and may not give the full picture of the fast-moving consumer goods industry in Kenya. Opiyo (2006) agrees that counterfeiting is treated with utmost secrecy, and that counterfeit products are made to look almost identical to genuine products in terms of physical qualities, making it impossible to discern between them.

Regulation, brand equity, pricing strategy, and perceived risks are the factors considered by as the ones that influence the entry of counterfeit pharmaceutical SMEs. This leaves non-SMEs out of the target population. He recommended effective enforcement of anti-counterfeiting legislation as deterrent to counterfeiting (Muthiani, 2011). The recommendations left out other possible causes of desire to counterfeit and therefore a gap for more investigation.

According to research conducted by (Karingu & Ngugi 2013) on the factors that determine the penetration of counterfeit agro-based goods in Kenya. In their case study on the infiltration of counterfeit agro-based products in Kenya, supply chain dynamics, information flow, consumer profiles, and dynamic technology were among the topics that were investigated in Nairobi, the capital city of Kenya. The penetration of counterfeit agricultural goods was demonstrated to be connected to a variety of elements, including government policies and supply chain dynamics, the flow of counterfeit information, client characteristics, and technologically based factors. This leaves a need for more research on the demand side of the business.

Despite the fact that the mobile sector has had a significant impact on the economy, KAM (2012) reported very little on mobile and agro-based products. Previously, while dealing with counterfeits in the technology industry, counterfeit research hasn't given much attention to mobile phones while currency, consumer goods, and the entertainment industry have all been discussed extensively. The repercussions of these topics are still being felt today. However in the mobile industry, very little has been said in terms of the effect and impact of counterfeits in the sector and the factors that favor counterfeiting of the same.

When it comes to the issue of counterfeiting, previous studies have only looked at samples from one culture (one nationality/country/region), whereas Hofstede (1990) emphasized that individuals subconsciously acquire cultural values from the society in which they are members, and that these values contribute to individuals' behaviors and allow for variability in their perspectives and decisions. Counterfeiting is a global issue with global effects that span across numerous cultural boundaries, thus it's necessary to examine it from different angles. This warrants research in diverse cultures, both exploratory and confirmatory. The amount of variance explained by existing models could be improved by taking cultural differences into account (Eisend & Schuchert-Guler, 2006). (De Matos, Ituassu, Alberto, Rossi, 2007) integrated and evaluated a contemporary model dealing with this subject matter in Brazil in their study that was published in 2007. The study was titled "Consumer attitudes against counterfeits: a review and extension," and tested a model that integrated the main

predictors of consumers' attitude and behavioral intentions toward counterfeits. Ang et al. (2001) proposed and tested a second model that looked at social factors (i.e. informative susceptibility and normative susceptibility) and personality factors (i.e. value consciousness, integrity, and personal satisfaction) as antecedents of consumer attitudes. This model focused on the relationship between social factors and consumer attitudes. Price-consciousness, price-quality inferences, and risk aversion were investigated as potential antecedents of consumer attitudes in the first model that was suggested and evaluated by Huang et al. (2004). They were able to arrive at the conclusion that additional important parameters needed to be integrated into the model with the aid of the discovery of moderators and boundary conditions.

As demonstrated, most marketing studies have tested for mediation and moderation separately. Very few marketing studies have employed methods to test for moderated mediation effects as far as the researcher knows, despite the fact that these models have been known to provide robust and precise results to the extent that they simultaneously include the different effects, providing an overall vision of the process studied (Borau *et al.*, 2015). It is in response to this confounding scenario, that this study adopts the use of a moderated mediation model to fill the existing gap in methodology by investigating the conditional effect of consumer knowledge on the indirect effect of social cultural factors on Purchase Intention through attitude.

#### **CHAPTER THREE**

## **RESEARCH METHODOLOGY**

#### **3.0 Introduction**

This chapter highlights the research design, empirical model and measurements, and the study variables are operationalized. It also covers the study region; sample size, sampling methodology, target population, variable measurement, pilot testing, and data presentation are all covered. The data gathering instruments are then described, including how to determine their quality. Data analysis, presentation, and ethical considerations would all be covered in this chapter. The study's independent variables are social cultural factors (Materialism, Subjective Norm, Moral intensity and Value consciousness), while Consumer Purchase Intention of Counterfeit Goods is the dependent variable, the mediating variable is Attitude, and the moderator variable is consumer knowledge. The hypotheses were tested using a variety of statistical approaches, and the chapter was summarized.

## **3.1 Philosophical Paradigm**

This study was guided by research philosophy and methodological foundations of positivism. Logic positivists, according to Indick (2002), support the value of scientific rigor in the pursuit of knowledge. In the positivism paradigm, the philosophy is based on cause and effect Cresswell (2008). They reject moral standards to justify some action. The study followed the positivity stance on epistemology, which perceives the researcher as objective and one only interested in establishing the causal relationship of variables (MacNeil & Chapman 2005). This school of thought rejects absolute principles in favor of situational assessments.

The study adopted this paradigm since it intended to emphasize objectiveness while investigating the hypothesized causal relationship between social cultural factors (SCF) and Purchase Intention (PI), since the positivism approach perceives the researcher as objective and value free observer who establishes a causal relationship so as to identify a relationship between IV and DV.

This study inferred and defined variables, hypotheses, and operational definitions based on the current theory, while grounded on the ontological position that concepts and variables represent phenomena in the empirical world as they actually exist, hence the researcher focused on operationalization and measure of the concepts.

#### **3.2 Research Design**

According to Creswell (2014), research design is a plan and procedure for study that covers everything from general assumptions to specific approaches on data collection and analysis. It's a plan that lays out the techniques and procedures for gathering and analyzing the data necessary for this study. It is the logical plan in which empirical data is related to the study aim, allowing one to draw conclusions and test theories as clearly as feasible (Yin 2009)

The study adopted an explanatory research design based on the causal-effect relationship (Hair, Ringle, & Sarstedt, 2013). The primary data collection instrument used was a cross-sectional self-administered questionnaire to collect data at one point to explore the factors that inform consumer social, cultural factors, and attitudes towards counterfeits. According to (Mark, Phillip & Adrian 2009), studies that seek to establish causal relationship between variables use explanatory design, since this design is premised on describing, analyzing and interpreting relationships among variables as well as hypothesis formulation and objectively testing relationships. The research tools were mainly quantitative since the research objective required answers through empirical assessments involving numerical measurement and analysis. The

quantitative approach quantifies data and makes it easier to analyze the data set (Zikmund & Babin, 2007).

For this study, the design was chosen because it provides numeric descriptions of the population and represents occurrences as they are, were, or would be (Oso & Onen 2011). Explanatory study designs have been used by several authors in their research in collecting data in Kenya (Fwaya et. al., 2012; Odhuon et. al., 2012). According to (Neuman, Newman & Dwyer, 2011), when executing explanatory research, cross sectional design is sufficient to understand what has been happening and is reliable in providing information when making inferences regarding the direct and indirect effect of social cultural factors on purchase intention of counterfeits. In addition, a crosssectional survey design can compare many variables at the same time. Explanatory research designs have been used in studies that are related to this topic, such as the ones conducted (Gakure, & Ngami, 2013) which investigated the impact that bank innovations had on the financial performance of commercial banks in Kenya, and by Moodley (2007), which investigated the impact that employee satisfaction levels had on customer service in the service utility operated by Telkom South Africa. This Study's Independent Variable is Social Cultural Factors SCF whose sub constructs are Materialism, Moral Intensity, Subjective Norms, and Value Consciousness. It was expected that attitude would operate as a mediator between the influence of the SCF on the dependent variable (purchase intention) and that consumer knowledge would tamper the action caused by the mediator.

## **3.3 Study Location**

A random sampling of the target population generation at and around Nairobi's universities was used to collect data. Although the study's sampling frame includes all Kenyan mobile phone subscribers, the sample was drawn from Nairobi's wider metropolitan region. Nairobi has expanded into a megacity, ranking as East and Central Africa's largest city and serving as an international, regional, national, and local trade, transit, collaboration, and economic growth hub. It serves as a connection to nations in eastern, central, and southern Africa. In addition to being home to 43 percent of Kenya's urban population and providing employment for 25 percent of the country's workforce, Nairobi is responsible for more than 45 percent of the gross domestic product of Kenya (UN HABITAT 2006). In addition to this, the fact that the researcher is located in Nairobi makes the process of data gathering more efficient and economical.

# **3.4 Target Population**

According to Sekaran & Bougie (2010), the target population is defined as all members of a certain group that are involved in the inquiry. (Mugendi, Kironchi, & Gicheru 2005) define the target population as a group of people about whom a researcher wants to learn more or make a statistical judgment.

The following principles for defining target populations, should be considered when defining target populations: achievement of research objectives, consideration of alternatives, and familiarity with the market, appropriate sampling units, identifying what should be excluded, not over-defining, reliability, and convenience (Aaker et al.1997),

The population of interest for this study was university students in Kenya, so chosen because they represent the whole republic hence are likely to give data representative of the whole country. Besides they are easily accessible hence convenient to sample. Use of college students is justified by the fact that students have been shown to be among those who intentionally acquire counterfeit goods (Chakraborty, Anthony & Bristol 1997). Moreover (Xu & Paulins, 2005) said that College students are normally surveyed in studies on consumption due to their familiarity with such categories but also due to the sheer size of their collective buying power (Deloitte 2019).

According to Johnston & Johal (1999), generation Y consumers, who are majority in the universities are found to be more susceptible to piracy and believe that buying pirated goods do not harm the sellers directly because they do not see the consequences of their actions to the economy, perceiving themselves as victims of inflated prices and blaming the industry for maintaining artificially high prices.

In total, 239762 university students in Kenya were targeted (Appendix G) (Kenya National Bureau of Statistics 2011/12). To gain access to this student population, students were approached in class settings to participate voluntarily, a formula advocated in the case of students by (Wang, Mathews, & Rothenberg 2020)

Since little information is available about the state of counterfeit a in the target market, the project sought a diverse range of consumer perspectives, which, while not compensating for sampling bias (Fricker, 2008), makes it easier to identify themes and topics that can be investigated further in the subsequent qualitative research. Convenience sampling was used to choose participants from the target population. For purposes of the study the target population was divided into four categories as below.

AGE	GENERATION
18-24	Y and early Z
25-34	Y
35-44	Y and late X
45-50 YRS	Х

 Table 3.1 Age Set of target respondents

Source: Researcher 2015

#### **3.5 Sampling Design**

Sampling is a data collection procedure or a subset of a population selected for a research study (Sekaran et al 2010). The 5 target universities were chosen using purposive sampling based on their size and accreditation to operate inside Nairobi's capital (Appendix F). Convenience sampling was then applied to collect data from students in the chosen universities.

#### **3.5.1 Sample Size and Sampling Techniques**

According to Churchill & Lacobucci (2005), sample size might be fixed or determined sequentially during the study. The sample size should be chosen with parsimony in mind (making do with the fewest numbers as possible). Sampling decreases costs, labor, and time limitations and should reflect the population's heterogeneity (Variance), tolerable error, and confidence level. The sample size should be greater than 300 in order to conduct exact statistical analysis (Stevens 1996).

The study was guided by Krejcie & Morgan's (1970) table (Appendix F) for determining sample size, which states that as the population grows, the sample size grows at a diminishing rate, eventually plateauing at slightly above 380 cases, and that there is little gain to justify the expense and time spent sampling beyond 384 cases (1995). The study sampled 500 respondents. The respondents were drawn from the 239762 students in Kenya (Appendix G) (Kenya National Bureau of statistics 2011/12).

The decision of having a large sample size in this study is based on submissions of earlier authors who opine that detection of conditional indirect effects (moderated mediation), requires high statistical power to avoid Type II errors, which is achieved by using a large sample (Borau *et al.*, 2015; Dawson, 2014; Hayes, 2013 Hayes, 2018; Nyakego 2017). Since this study takes a quantitative epistemological paradigm and uses the Hayes moderated mediation model 14 the sample size of 500 was found adequate since it is way above what is suggested by calculation and hence gives more reliable conclusion and confidence in generalization about the population since larger sample increases the accuracy of results (Delice, 2010).

Authors have explored alternative estimators to reduce nonresponse bias (Panter-Brick, Goodman, Tol, & Eggerman, 2011), to optimize over a set of response variables (Skinner & Rao, 1989), or for situations where frame totals are not known (Kalton & Anderson 1999; Skinner 1998). Optimization formulas typically allocate a sample to produce the most precise estimates (lowest variance) subject to a cost constraint (Hartley & Marshall 1974) or to produce the smallest mean squared error subject to the constrained cost (Biemer, 1984). Alternatively, the optimization can minimize cost subject to precision constraints (Demnati, & Rao, (2007). In this paper, we focus on reducing variance for fixed variables.

Chiarucci, Di Biase, Fattorini, Marcheselli, & Pisani (2018) have opined that in situations where the sampling frame is not available, the most effective probabilistic schemes for sampling plants differ from the traditional schemes and their choice is mainly determined by practical considerations on the nature of the community to be sampled. In situations where the population is so large that it's not possible get a sample frame, Heckathorn (2007) says that non-random samples may be used to generate unbiased data of meaningful size, regardless of how the researcher purposively selects the respondents.

Ampiah, & Adu-Yeboah, 2009 found that where there is lack of a sampling frame, a larger sample is encouraged since it produces a weighted sample proven to be unbiased for the given population. This position was also held by (Baah, Amponsah, & Adoma) who opined that incase of lack of a sampling frame; unreliable/unknown population size preventing mathematical determination of sample size, a large sample size suffices to reduce error.

This position is supported by Samantha R. Lattof in 2018 who said that in cases where there is a shortage of high quality data including sampling frame, better techniques including respondent driven sampling (RDS) and large samples is adequate to reduce type 2 errors.

#### Krejcie and Morgan's formula for sample size

The Krejcie & Morgan's sample size calculation is based on p = 0.05 where the probability of committing type I error is less than 5 % or p <0.05.

$$S = \frac{\chi^2 * NP (1 - P)}{d^2 (N - 1) + \chi^2 P (1 - P)}$$

Where,

S= required sample size.

 $\chi^2$  = the table value of chi-square for 1 degree of freedom at the desired confidence level (0.05 = 3.841).

N = the population size.

P = the population proportion (assumed to be 0.50 so as to get maximum sample size) d = the degree of accuracy expressed as proportion (0.05).

$$S = \frac{3.841 * 239762(0.5)(0.5)}{0.05^2(239761) + 3.841(0.5)(0.5)} = 382$$

#### **3.6 Data Collection Instruments and Procedure**

Questionnaires were used as the instrument of data collection. The use of this type of instrument is hinged on the fact that it is above the researchers variability and therefore preserves objectivity of the collected data, is less costly, faster to administer, and more convenient for respondents because they can fill it out whenever they want (Hair, Black, Babin & Anderson, 2010). The questionnaire was closed one with structured closed-ended questions on a customized five-part Likert scale to collect data on the independent variables from the respondents. Respondents were asked to indicate agreement with each item on a five-point scale Likert scale ranging from 1=strongly disagree, 2=disagree, 3=neutral, 4=agree, and 5=strongly agree.

The scales used were tested for convergent validity using Cronbach alpha coefficients and those with coefficient above 0.7 were deemed to be acceptable.

To create quantitative data, primary data was obtained via the questionnaires from the target universities. Self-administered survey questionnaires were delivered to each target respondent.

A three-step approach was used to create the survey questionnaire. First, the manifest factors were researched thoroughly in the consumer behavior literature. Second, the questionnaire was modified through a number of meetings with two senior executives that deal with marketing from a major mobile phone firm and a few seasoned consumer behavior academics. Finally, a pilot study of 46 mobile phone users, randomly chosen from the target universities was used to conduct significant pretesting and improvement of the survey questions. Results from a pilot study revealed some questions were not well understood by the respondents, or were irrelevant to the mobile phone industry. The interviewers used this pilot study as a practice session.

The final questionnaire contained a total of 60 questions for all variables. In addition, some demographic variables, such as age were included in the questionnaire, as controllable.

#### **3.6.1 Data collection procedures**

The researcher initially got permission from Moi University's Graduate School to conduct the study before heading out into the field to collect data. The university campuses in Nairobi CBD were chosen using a purposeful manner from among the public certified universities. Students from chosen university campuses in Nairobi metropolitan were given semi-structured questionnaires to complete using the dropand-pick method. Data was also collected by email. The filled instruments were then collected for further analysis.

## 3.6.2 Data collection and measurement of research variables

As the study data collection involved self-response, there was a need to treat them for single source bias. Single source refers to the degree to which the relationship between two variables deviates from the true core correlation when using single source (Podsakoff & Organ 1986) producing illusory correlation (MacNeil & Chapman, 2005). The respondents were re assured that the instruments were coded for purposes of matching the data entry and besides the cover page of each questionnaire consisted of information assuring the respondents of anonymity and confidentiality and the fact that data is collected voluntarily and would only be used for academic purpose.

The measurement variables for each variable were taken from previous research, and if they were statistically significant, they were adopted and reworked to fit this thesis and our field of study. On a five-point Likert scale, participants were asked to tick as appropriate. Individuals would choose from five response options on this scale: 1 = highly agree, 2 = agree, 3 = neutral, 4 = disagree, and 5 = strongly disagree. A Likert scale was considered appropriate for this research since it is an attitude measurement tool that allows respondents to rate how strongly they agree or disagree with precisely formulated statements, ranging from extremely positive to extremely negative attitudes toward a certain object.

The table below shows where measures of various variables are borrowed from.

Variable/ Construct	<b>Reference for Measure/ Sources</b>	No of Items	
Purchase intentions	Zeithaml et al., 1996	5	
Attitude	Shih, I Cheng et al., 2011,	7	
	Huang, et al., 2004	4	
SCF-Materialism	Richins Marsha L 1992	16	
SCF-Moral Intensity	Ang, et al., 2001	4	
SCF-Subjective norms	Shih, I Cheng et al., 2011,	3	
	Ajzen 1991	2	
SCF-Value Consciousness	Lichtenstein & Burton, 1989; Peterson &	9	
	Wilson, 1985),	2	
Consumer knowledge	Smith & Park's (1992), Chen & Li, 2007	8	

 Table 3.2 Measurements of Variables/Constructs and their sources

Source: researcher 2015

 Table 3. 3 Operationalization of variables

Variable	Measure/operationalization	Developed by	
Social	How important is the below person's approval for your	Shim et al.	
Cultural	Purchase of goods/services?	(2001)	
factors-	Important friends		
Subjective	• Parents		
Norm	• Siblings		
	Peers/colleagues		
SCF-	Success	Richins Marsha	
Materialism	• Some of the most important achievements in life include	L. 1992	
	acquiring material possessions		
	• I don't place much emphasis on the amount of Material		
	objects people own as sign of success		
	• The things I own say a lot about how well I'm doing		
	• I like to own things that impress people		
	Centrality		
	• The things I own aren't all that important to me.		
	• I enjoy spending money on things that aren't practical.		
	• Buying things gives me a lot of pleasure.		
	Happiness		
	• I have all the things I really need to enjoy life.		
	• My life would be better if I owned certain things I don't have		
SCF-	<ul> <li>I'd be happier if I could afford to buy more things.</li> <li>L consider honesty as an important quality for one's</li> </ul>	Ang et al 2001	
Moral	• I consider honesty as an important quality for one's character	Alig et al 2001	
Intensity	<ul> <li>I consider very important that people be polite</li> </ul>		
memory	<ul> <li>I admire responsible people</li> </ul>		
	<ul> <li>I like people that have self-control</li> </ul>		
Attitude	Counterfeits have a satisfying quality.	Shih I change et	
towards	<ul> <li>I have a positive perception towards counterfeit goods</li> </ul>	al 2011	
counterfeits	<ul> <li>While shopping, buying counterfeit goods is a better</li> </ul>		
	choice		
	• There's nothing wrong with purchasing counterfeit		
	goods		
Purchase	• I will buy a counterfeit product when I go shopping	Zeithaml et al.,	
Intention	• I will Think about a counterfeited product as a choice	1996	
	when buying something		
	• I will Recommend to friends and relatives that they buy		
	a counterfeit product		
	• Say favorable things about counterfeit goods.		
Consumer	• I feel very knowledgeable about phones	Smith & Park's	
Knowledge	• I can give people advice about different brands of	(1992), Chen &	
	phones	Li, 2007	
	• I only need to gather very little information in order to		
	make a wise decision		
	• I am confident and able telling differences in quality		
	different brands of phones. Compared to an average		
	person, I know a lot about mobile phones		
	• My friends consider me as an expert on mobile phones		
	• I can easily tell the difference between a counterfeit		
	phone and a real one		
	• I can tell the value I can get from a counterfeit phone as		
	compared to a real one		

#### **3.7 Quality Criteria**

The quality of a research study to a large extent depends on the accuracy and quality of the data collection procedures and the instruments used. The validity and reliability of the thesis were assessed to ensure the study's quality. Reliability and validity measure the relevance and correctness of the data.

## **3.7.1** Validity of the research instrument

According to Co-operation and Development (2013), validity is the degree to which results obtained from the analysis of data actually represents the phenomenon under study, measuring what it ought or supposes to measure. This study addressed four approaches to establishing validity: face validity, content validity, and criterion-related validity and construct validity. Face validity is considered to be present in an instrument if it is clear, easy to understand questions and covering well the concept of the study (Co-operation & Development, 2013). Mohajan (2018) opines that content validity usually depends on the judgment of experts a field. Face and content validity were assessed by exhibiting the questionnaire to a focus group of ten students and two academic experts, in accordance with Bell & Bryman (2006) proposal that allowing experts to review the questionnaire is a good technique to ensure content validity. Subsequently any confusing, in effective and vague issues were modified or removed. Further the questionnaire was simplified and made easy to respond in a language that all participants were comfortable with, and the questions were anchored on the findings of the pilot test and the subsequent amendments.

According to (Souza, Alexandre, & Guirardello, 2017), construct valid measures to the extent that the scale measures what it intends to measure (the degree to which a group of items really represents the construct to be measured) and was guaranteed by doing a correlation analysis (Nolan & Heinzen, 2007) and testing for multicollinearity using discriminant validity to determine the extent to which each construct variable differs from other construct variables.

Souza et al (2017) opine that criterion validity shows the degree to which constructs correlate with each other. Criterion Bivariate correlation were run to ensure all correlations were less than or equal to 0.90 and show how much of the DV is explained by the IV.

#### 3.7.2 Reliability of the research instrument

Reliability refers to the ability of a test to yield consistently same results if measurements are re-taken in similar conditions or call out and should also distinguish between changes in the measure due to a genuine change in the condition being measured as ensuring each research stage was made so clear that another researcher could replicate the study just by reading the original paper, as recommended by Yin, 2009.

Cronbach coefficient alpha was estimated using statistical package for social sciences (SPSS) in order to ensure the questionnaire was reliable and had internal consistency and dependability. Alpha above 0.70 (Nunnally & Bernstein, 1994) would indicate acceptable levels internal consistency.

## 3.7.3 Pilot test

To validate the questionnaire and test content validity, a pilot research was carried out. A pilot study, according to Cooper and Schindler (2014), is a small-scale research project that collects data from respondents who are similar to those who would be used in the bigger study. The study sought opinion from the supervisors, lectures and experts in the research field. Any item identified as sensitive, confusing, or biased was modified or eliminated to increase content validity of the instrument. There were 46 participants in the pilot study, and each independent variable was studied separately. For several variables where the Cronbach's Alpha values less than 0.7 the item was altered or eliminated, and the remaining items subjected to further reliability testing with the until all the findings had an alpha above the recommended 0.7 (SPPS results appendix H). The amended questionnaire, which incorporated all the improvements from the pilot research, is the one that was used.

#### **3.8 Data Processing, Analysis and Presentation**

Data cleaning was done and the data was made ready and available. The Statistical software for social sciences (SPSS version 23) was used to analyze the field data for this study. The data were analyzed including testing of the hypotheses and establishing the link between the research variables using both descriptive and inferential statistics, such as correlation analysis, analysis of variance, and regression. Descriptive statistics such as frequency distribution was done to explain the characteristics of the respondents' behavior pattern and profile their personal information. As the study shows cause effect relationship, Correlation coefficient was calculated to show the level of relationship between variables and significant level tests conducted to check the magnitude of the linear relationship between such variables. To determine reliability and consistency of items Cronbach's alpha coefficient was conducted. The determinant of correlation matrix was generated to provide the information on the multicollinearity

A principal component factor analysis with varimax rotation was conducted to cluster the variables of the questionnaire into several factors according to their loadings. Factors with Eigen value less than one were considered insignificant and were excluded from the study. Kaiser-Meyer-Olkin (KMO) criterion and Bartlett's test of statistics were performed as a check to substantiate the appropriateness of conducting a factor analysis and also to examine the sampling adequacy.

## **3.8.1 Data Processing**

Processing of data included coding the responses, cleaning, screening the data and selecting the appropriate data analysis strategy for testing the hypothesis. Coding involved assigning a numeric symbol to enable data entry to the system which would help to minimize errors and hence facilitate further analysis. This involved assigning a code to each item in the questionnaire, which was entered into a statistical analysis software package SPSS version 23. Cleaning and screening the data included checking for inconsistencies, missing responses, and other errors to ensure accuracy and completeness

## 3.8.2 Data cleaning and screening

Collected data was screened and cleaned to find out whether there were errors that could be corrected as recommended by Tabachnick & Fidell, (2013b). Cleaning and Screening involves reading the original data against data entered in the computer and checking for inconsistencies and missing data to ensure accuracy and completeness.

## 3.8.3 Data transformation

A thorough examination and transformation of the data was done to reveal information that might be used to draw inferences and aid in decision-making (WI, 2011). Data was checked for Completeness and consistency and changed from Likert scale to ratio scale variables that could be put through factor analysis. Arithmetic methods were used to move the data from its original type to a new format suitable for further analysis and summarization using SPSS. Proofreading by someone other than the researcher was done to check accuracy of data entry as recommended by Sekaran & Bougie (2010).

#### 3.8.4 Missing data and outlier treatment

Smuk (2015) says that a good design reduces the chance of missing data occurring but that simplest technique to handle missing data particularly in a questionnaire is simply to use only those records which have been fully observe. Various methods were used for making corrections for missing data including ignoring if data is missing at Random (MAR) as recommended by (Hair et al., 2010) or list wise deletion if data is missing completely at random (MCAR).

Tabachnick & Fidell (2013b) defines an outlier as a case with an extreme value on one variable (a univariate outlier) or a strange combination of scores on more than two variables (multivariate outlier) that can statistically distort the data, hence needs to be dealt with. Outliers in the data points were detected through standardized scores for which scores outside the given standard deviation  $\pm 3$  were considered outliers (Howell, 2009).

## 3.8.5 Assessment of Data Normality, Linearity and Independence

To evaluate linearity, the data was inspected using Pearson's correlation and scatterplots for all the variables. To be able to determine whether the data was normally distributed, Kolmogorov-Smirnov (KS) and Q-Q plots for X, M, and Y were used.

#### **3.9 Multi Variate Analysis**

In order to identify the nature of the connection that existed between the dependent variable and the independent factors, multiple regressions were carried out and several regression models utilized in formulation of an equation that, when solved, provides a description of the dependent variable in terms of the independent variables. Assumptions of multiple regressions were checked to ensure that they hold prior to subjecting them to a parametric test (Tabachnick et al 2013b).

## **3.9.1 Empirical Model Specification**

According to Hair et al. (2010), a model enables the defining of connections between variables. To determine if the hypotheses were multiple linear regressions, several models was utilized. This approach has already been applied to empirical investigations to determine correlations between different variables (Kraus, Harms, & Schwarz, 2006).

To ascertain the direct impacts of Social Cultural Factors (SCF) on Purchase Intention (PI), Social Cultural Factors (SCF) on Attitude (ATT), and Attitude (ATT) on Purchase Intention (PI), the data gathered was analyzed to establish if there were direct effects to evaluate and  $H_{01}$ ,  $H_{02}$ , and  $H_{03}$ . The linear regression analysis was used to investigate the effects of an independent variable on the dependent variable while adjusting (maintaining constant) for other independent variables (Allison, 1999). The test statistics that were calculated and deduced comprised the P values and the coefficient of determination  $R^2$ . A variable's P value has to be less than 0.05 in order to be regarded as a significant predictor of the dependent variable (Hair et al. 2010, Field, Miles & Field, 2012)

To test the equations for direct effects, the linear equations 1 to 3 below were tested to measure if the direct impacts were statistically significant.

## **3.9.2** Test for assumptions of multiple regression

According to Hair et al. (2010), the assumptions of regression analysis are essential to ensure that the results obtained are representative of the sample in order to obtain the best possible results. This is because, when assumptions are not met, the results may not be accurate and may increase chances of committing type I or type II errors or even a failure to estimate the significance or size of effect(s) correctly.

This can be accomplished by ensuring that the results obtained satisfy the requirements of the regression analysis. The tests include checks for normality, linearity, homoscedasticity, and multicollinearity, as well as an analysis of the errors' degree of independence from one another.

Normality is the assumption that the scores on a continuous variable are normally distributed about the mean (Schmidt & Finan, 2018) and is one of the major assumptions of regression models and since it indicates that there is no significant departure from the normality identified. In this study, normality test was done using Kurtosis and Q-Q graphs.

Linearity was tested using correlations among variables as well as bivariate tests which is the most common way to identify any nonlinear patterns in data Hair et al., (2006). To test for homoscedasticity, scatter graphs were used to determine whether or not there was a consistent level of variation in the dependent variable (Purchase Intention) across all of the values of the independent variables (social cultural factors).

In order to test for the presence of multicollinearity in the regression model, Tolerance value and the variance inflation factor were utilized (VIF). For each pair of independent variables, Bryman & Cramer (2004) recommend a tolerance value of 0 to 1, with a cutoff of 0.8. In cases where the VIF is less than 10, multiple linear regression models would be implemented (Gravetter & Forzano, 2009).

## 3.9.3 Models for direct effects

The direct effect of social cultural factors on Purchase intention (path c) was given by equation 1, the effect of Social cultural factors (X) on Attitude (M) (path a) was given by equation 2 while the effect of attitude the mediator on consumer counterfeit purchase intention while controlling for the social cultural factors (path b) was given as shown in equation 3

$Y = \alpha_1 + \beta_1 X + \varepsilon_1$	Equation 1
$M = a_2 + \beta_2 X + \varepsilon_2.$	Equation 2
$Y = \alpha_3 + c'X + \beta_3 M + \epsilon_3$	Equation 3

Where:

Y = Represents Purchase intention of counterfeits (Response Variable)

M= Represents Attitude towards counterfeits (Mediator variable)

X=Represents Social Cultural Factors, (Predictor variable)

 $\alpha_1$ -  $\alpha_3$  = is a constant and the model equation intercept which is the value of DV when IV is zero

 $\beta_1$ - $\beta_3$  = Beta values, Path coefficients. Represents the coefficient of regression, the change induced on the dependent variable by the respective predictor variables  $\epsilon_1$ - $\epsilon_3$  represents the respective error terms

# **3.9.4 Models for indirect effects**

The mediating effect of attitude on relation between Social Cultural factors (SCF) and Purchase Intention (PI) was given by Model 4 below while the moderated mediation effect of consumer knowledge on attitude towards counterfeits was given by Model 5,

$Y = \alpha_4 + \beta_4 M + \beta X + \varepsilon_4$	Model 4
$Y = \alpha_5 + \beta_5 M + \beta_5 W + \varepsilon_5$	Model 5

#### 3.9.4.1 Model for mediation testing

To ascertain the function of attitude in mediating the link between social and cultural characteristics and purchase intention, the data was studied. A mediation model is one that uses a third intermediate variable, the mediator, to identify and explain the mechanism or process that underpins an observed link between an independent variable and a dependent variable. To achieve this second objective of the study (mediating effect), Hayes (2018) model 4 was used. The indirect effect was tested using a percentile bootstrap estimation approach with 5000 samples.

The procedure by Baron & Kenny (1986) and later harnessed by Hayes (2013) was adopted for testing mediating effect of attitude on the relation between SCF and PI. This test addresses hypothesis H<sub>04</sub>. The value inherent in conducting such indirect tests is that they provide an enhanced and deeper understanding of the relationship between the IV and DV (Hayes 2018).

According to Hayes 2017 and Preacher, Rucker & Hayes 2007, mediation is said to occur when the causal effect of an independent variable X on dependent variable Y is transmitted through a mediator (M). In this study mediation would be said to have occurred if and when the causal effect of the Independent variable Social cultural factors on the dependent variable Purchase Intention is transmitted through the mediator (attitude). Mediation was tested using a macro process tool in SPSS version 23.

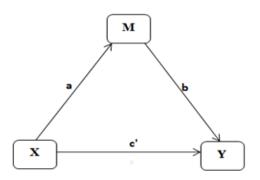
Several regressions were run as recommended by Hayes 2012 and improved by (Zhao & Lynch 2010). These regressions test the fourth hypothesis ( $H_{04}$ ) and are done in four equations models.

The first is equation 1, in which the independent variable (X) significantly predicts the dependent variable (Y), and the second is equation 2, in which the independent variable (X) significantly predicts the mediator (X predicts M), the third is equation 3 where the mediator variable predicts the dependent variable significantly while holding for the impact of X. (M predicts Y controlling for X) and the fourth equation 4 which tests the indirect effect of X on Y.

In this study Equation 1 established the relationship between Social cultural factors and Purchase intention, Equation 2 established the relationship between social cultural factors and attitude of the mediator while Equation 3 established the mediating effect of attitude on the relationship between Social Cultural Factors and Purchase Intention (PI).

Below are the model Equations

 $Y = \alpha_7 + C_1 X + \boldsymbol{\epsilon}_7 \dots Equation 1$  $M = \alpha_8 + \beta_8 X + \boldsymbol{\epsilon}_8 \dots Equation 2$  $Y = \alpha_9 + C_1 X + b_1 M + \boldsymbol{\epsilon}_9 \dots Equation 3$ Indirect effect Y = a\*b.....Equation 4



**Figure 3.1: Hayes mediation model** 

## Where:

- Y: Represents the dependent variable (Purchase Intention)
- X: Represents the independent Variable (Social Cultural Factors)

M: Represents the mediator variable (Attitude)

- $\alpha_7$   $\alpha_9$ : Represents constants representing the Y and M intercepts in respective equations.
- $\beta_8$ : Represents the effect of slope co efficient denoting the influence of the independent variable (SCF) on the mediator variable (Attitude)
- C<sub>1</sub>: Represents the effect of slope of the co efficient denoting the influence of the independent variable (SCF) on the dependent variable (PI)
- $\varepsilon_7$   $\varepsilon_9$  =Represents the respective error terms

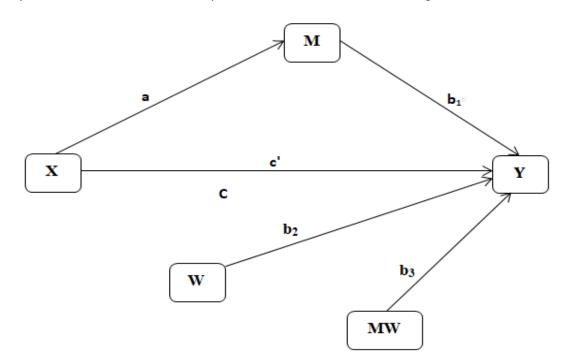
Baron & Kenny (1986) opine that full mediation occurs when the control of the mediator in equation 3 makes the relation between the independent variable and the dependent variable equal to zero. In the case of partial mediation the value of the direct effect of the IV merely reduces but remains significant and does not equal to zero. In this study full mediation would be deemed to have occurred if exclusion (Control) of attitude would reduce the effect of the direct effect between the Independent variable (social cultural factors) and the DV (Purchase Intention) to zero., otherwise it would be deemed partial if such introduction of the mediator merely reduces the direct effect but it remains significant. The models were advanced on the assumption that there exists a linear relationship between the variables.

#### **3.9.4.2** Model for moderation testing

The Moderation model was used to determine the moderating effect of Consumer knowledge on the relation between Attitude and Purchase Intention and test Hypothesis  $H_{05}$ . Moderation implies an interaction effect where introducing a moderator variable changes the direction and magnitude of the relationship between the independent variable and the dependent variable (Hayes 2015). The research hypothesis  $H_{05}$  for moderation in this study tested the moderating effect of Consumer knowledge on relation of Attitude and Purchase Intention.

According to Hayes (2012) equation 1 is decisive to establish if there is an effect of the interaction of the mediator variable (Attitude) and the moderator (consumer knowledge) on the independent variable (Purchase Intention) ( $b_1+b_2W$ ).

 $Y = \beta_5 + a_5 M + a_5 W + a_6 M W + \varepsilon_{5=} \dots \beta_5 + b_1 + b_2 W \dots Equation 1 \dots H_{O5}$ 



#### **Figure 3.1: Moderation Test**

Source: Hayes 2015 Model 14

Where

M=Mediator variable Attitude

 $\beta_5$ =the mediator intercept

a<sub>5</sub>M= Represents the effect of the Mediator variable on the Independent variable (attitude on Purchase Intention)

a<sub>5</sub>W=Represents the effect of the moderator variable (Consumer knowledge) on the Independent variable (Purchase Intention)

- a<sub>6</sub>= Represents the effect of the interaction of the Mediator variable (Attitude) and the moderator variable (Consumer Knowledge) on the Independent variable (Purchase Intention).
- X: Represents the independent variable (SCF)
- W: Represents the moderator variable (Consumer knowledge)
- MW: Represents the product of the interaction of the mediator variable (Attitude) and the moderator variable (Consumer Knowledge).

 $\mathcal{E}_5$ =Error term

## 3.9.4.3 Model of moderated mediation

The last objective of the study was to test Moderated mediation and to determine the mediating effect of Attitude on the relation between social cultural factors and Purchase Intention as conditioned by consumer Knowledge, and test Hypothesis  $H_{06}$ . Moderated mediation refers to the integration of moderation and mediation analysis to understand the conditional nature of the mechanism(s) by which a variable transmits its effect on another (Hayes 2017). The research hypothesis  $H_{06}$  for moderated mediation in this study tested the indirect effect of social cultural factors on Purchase intention through attitude conditioned by consumer knowledge.

According to Baron & Kenny (1986), later improved by Hayes (2012), two equations are used for this. Equation 1 establishes the effect of the interaction of the Mediator variable (Attitude) and moderator variable (Consumer Knowledge) on the Independent variable (Purchase Intention) while equation 2 establishes the conditional effect of the moderator on the indirect effect of the Independent variable on the dependent variable through the mediator variable.

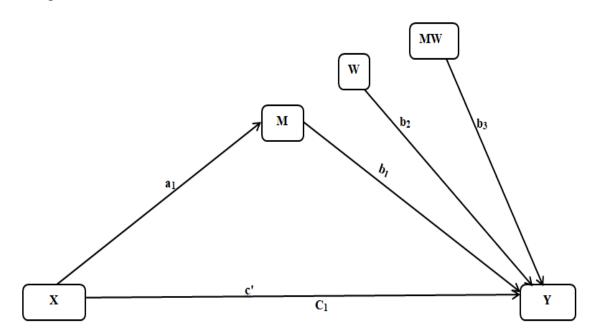
 $Y = \beta_6 + a_6 M + a_7 W + a_8 M W + \varepsilon_6.$  Equation 1

$$Y = \beta_7 + a_7 b_7 + a_7 b_7 W + a_7 b_7 M W + \varepsilon_{7=} a_1 (b_1 + W (b_2 + b_3 M) \dots \varepsilon_{10} Equation 11$$

Where

- M=represents the mediator variable
- $\beta_{6}$ =Represents the intercept of the mediator variable (Attitude)
- $a_{6=}$  Represents the effect of the independent variable on the mediator variable (SCF on ATT)
- a<sub>7</sub>= Represents the effect of the moderator variable (Consumer Knowledge) on the mediator variable (attitude)
- a<sub>8=</sub> Represents the effect of the interaction of the mediator variable (Attitude), the moderator variable (Consumer Knowledge) and the independent variable (Purchase Intention).
- X= Represents the Independent Variable (SCF)
- M=Represents the mediator (ATT)
- W=Represents the moderator variable (CK)
- MW= Represents the product of the interaction of the mediator variable and the moderator variable
- $\beta_7$ =Represents the intercept of dependent variable (Purchase Intention)
- C<sub>1</sub>=Represents the effect of the Independent Variable (Social cultural factors) on the dependent Variable Purchase Intention
- $\beta_3$ =Represents the effect of the mediator variable (Attitude) on the independent variable (Purchase Intention)
- $\mathcal{E}_{6-7}$ =Represents respectively the error terms

Preacher et al (2007) and Hayes (2012) argues that moderated mediation is conducted after confirmation that the mediator is significant in mediating the relation between the independent variable and the dependent variable. Moderation in this study was conducted after confirmation of the fact that Attitude is a significant mediator in the relation between social cultural factors and Purchase intention. Moderated mediation is interpreted to mean that the influence that social cultural factors have on purchase intention through attitude is conditioned by consumer knowledge. The moderated mediation was tested using process macro tool SPSS version 23. The default criteria accepting or rejecting the moderated mediation hypothesis using macro is 95% confidence interval. Where the interval generated on the basis of 0.05 CI includes zero then the decision of no relation should be arrived at and the null hypothesis accepted.



**Figure 3.2 Moderated Mediation Statistical Model** *Source: Hayes (2017) Model 14* 

X=Represents the Independent variable (Social cultural factors)

- Y= Represents the dependent variable (Purchase Intention)
- M= Represents the mediator variable (Attitude)
- W= Represents the Moderator variable (Consumer Knowledge)

- MW= Represents the Interaction of the Mediator variable (Attitude) and the Moderator variable (Consumer Knowledge)
- a<sub>1</sub>= Represents the effect of the Independent variable (Social cultural factors) on the mediator variable (Attitude)
- b<sub>1</sub>= Represents the effect of the mediator variable (Attitude) on the Dependent variable (Purchase Intention)
- b<sub>2</sub>= Represents the effect of the moderator variable (consumer Knowledge) on the Dependent variable (Purchase Intention)
- b<sub>3</sub>= Represents the effect of the interaction of the mediator variable (Attitude) and the moderator variable (consumer Knowledge) on the Dependent variable (Purchase Intention)
- C<sub>1</sub>= Represents the effect of the Independent variable (Social cultural factors) on the dependent variable (Purchase Intention)
- C<sup>1</sup>= Represents the conditional effect of the moderator on the indirect effect of the mediator on the relation between the Independent variable (Social cultural factors) and the independent variable (Purchase Intention)
- E1=Represents respective error terms

## 3.10 Hypothesis Testing

The study assumed that social cultural elements influence purchase intention through attitude, but that the effect was mitigated by consumer knowledge. As a result, six pertinent hypotheses were established in the conceptual framework to guide the investigation. All hypotheses were tested with a 95% level of confidence (level of significance, = 0.05). The null hypothesis would be rejected for being not significant if the p-value was less than 0.05. As a result, the alternative hypothesis would be accepted.

	Hypothesis	Parameters	Interpretation and
			test criteria
H <sub>01</sub>	Social cultural factors have no significant effect on the purchase intention of counterfeit mobile phones in Kenya.	β-TestandR²Coefficientofdetermination.Confidencelevel95%Significantlevel0.05	Accept if $\beta$ is significant and $R^2$ significant at P $\leq 0.05$ , otherwise reject null hypothesis
H02	Social cultural factors are not significant determinants of attitude towards counterfeits in Kenya	<ul> <li>β-Test and R<sup>2</sup></li> <li>Coefficient of determination.</li> <li>Confidence level</li> <li>95%</li> <li>Significant level</li> <li>0.05</li> </ul>	Accept if $\beta$ is significant and $R^2$ significant at P $\leq 0.05$ , otherwise reject null hypothesis
H03	There is no significant effect of Attitude towards mobile phones on purchase intentions of the phones in Kenya	<ul> <li>β-Test and R<sup>2</sup></li> <li>Coefficient of determination.</li> <li>Confidence level</li> <li>95%</li> <li>Significant level</li> <li>0.05</li> </ul>	Accept if $\beta$ is significant and $R^2$ significant at P $\leq 0.05$ , otherwise reject null hypothesis
H04	Attitude does not significantly mediate the relation between social cultural factors and Purchase intention	ModelEffect,Confidenceinterval(bootscamp) and $\Delta R^2$	Accept if interval does not pass through zero and $\Delta R^2$ significant, otherwise reject
<b>H</b> 05	Consumer knowledge has no significant moderation effect on the relationship between attitude and Purchase Intentions of counterfeit products.	ModelEffect,Confidenceinterval(bootscamp) and $\Delta R^2$	Accept if interval does not pass through zero and $\Delta R^2$ significant, otherwise reject
H06	Consumer Knowledge has no significant moderation mediation effect on the relationship between social cultural factors and purchase intention through attitude	ModelEffect,Confidenceinterval(bootscamp) and $\Delta R^2$	Accept if interval does not pass through zero and $\Delta R^2$ significant, otherwise reject

Source: Primary Research 2015

## **3.11 Ethical Considerations**

The poll was conducted in full compliance with all of Bryman & Bell's (2012) established ethical criteria. The necessity for ethical consideration was to assure that the researcher had not violated the research ethics, which include not causing any damage to the participants, failing to get informed permission, invading participants' privacy, and lying about the purpose of the study. The replies to our questionnaire were kept confidential, and all of the information that was gathered was utilized only for the thesis. Our questionnaire included all of the details about the purpose of the research as well as the names of the writers. The confidentiality of the respondent was protected in every instance by waiving the need that they provide their identifying information, and informed permission was obtained before any data was collected. The responders were given the assurance that the information they provided would only be used for academic reasons and would be kept in the strictest confidence possible. The only reason why demographic information was requested was for statistical analysis, and respondents were given the assurance that their answers would not be linked to their individual identities in any way. This thesis did not plagiarize others' work and showed respect for studies conducted by earlier scholars by mentioning such studies in accordance with the guidelines of references that were established by Moi University.

#### **CHAPTER FOUR**

# DATA ANALYSIS, PRESENTATION AND INTERPRETATION OF FINDINGS

## **4.0 Introduction**

The results of the investigation are presented in this chapter using a combination of inferential and descriptive statistics to highlight the major aspects of the data and assess the hypotheses that were tested for the study. In it, the results of the study are discussed in light of the objectives of the research, and it also includes a summary of the chapter, as well as information on the research response rate, data screening and cleaning, demographic characteristics of study variables, descriptive statistics of independent variables, reliability and validity test, data normality analysis, factor analysis, control effects, correlation of variables, regression analysis, and testing of the hypothesis. All results were reported based on APA 2019 manual.

## 4.1 Response Rate

A total of 500 questionnaires were administered to potential respondents but only 465 were returned representing 93% response rate. From the returned questionnaires, 15 we not filled satisfactorily or had data outliers, and were therefore not used in the final analysis and subsequently only 450 were available for further processing.

Age in Years	Frequency	Percent	Cumulative Percent
18-24	194	43.1	43.1
25-34	127	28.2	71.3
35-44	78	17.3	88.7
45-50	51	11.3	100
Total	450	100	

 Table 4.1: Distribution of age of respondents

Source: Survey data: (2015)

#### **4.2 Data Screening and Cleaning**

Data was screened and cleaned to check for and address errors that could have arisen as data was entered into the software for analysis (Bernett & Lewis, 1994; Tabachnick & Fidell, 2013). This activity involved classification and summarization of data to make it easy to analyze by deciding which data and which methods to use in analysis but also examination of missing values and dealing with outliers. This activity was done conclusively which ensured that the data subjected to further statistical investigations was free from error and could therefore provide information and statistics useful to the analysis and could give reliable inferences.

## **4.2.1 Data Transformation**

Data in this study was transformed in multiple methods so as to convert it to a measurable object with similar variances. The transformation involved reorganizing and restructuring the raw data in such a way that the consequent data mining would retrieve strategic information efficiently and easily. First the responses were checked for accuracy, completeness and consistency by the research assistants to ensure that respondents answered the relevant fields. Consequently the data was cleaned and reduced using smoothing, clustering and binning processes. All raw data was then gathered and expressed in summary form so that it could be put in the statistical analysis system. Likert scale data was given numerical surrogates so that it would be inserted in SPSS for further analysis. The 5 point likert range was given numerical numbers from 1 to 5 respectively (1=strongly agree, 2-agree, 3-Neutral, 4=disagree, and 5= strongly disagree). The control factors were also allocated numerical values for example in gender (Male 1 and female 2). Where necessary SPSS was used to transform data by computing composite variables, replacing missing variables and

also to remove and decode similar variables. In the analyses, variables were centered, and control variables were set in the first block in line with (Aiken and West 1991)

#### **4.2.2 Missing Data Detection and Treatment**

Smuk, 2015 opines that one of best and efficient ways to handle missing data in the analysis is to use well filled questionnaires and therefore it important to ensure the instruments are well filled in the field. Thus the researcher minimized missing values right from the field at the time of questionnaire filling, reminding respondents to amend whenever there were gaps in accuracy as guided in the works of (Aminu & Sharif, 2014). Any missing values were replaced by the mean as proposed by (Hair, Ringle, & Sarstedt, 2013).

About 3% of the data in this research (15 items of the returned instruments) were not processed further since they were too defective.

Response	No of questionnaires	%
Effective questionnaire	450	97%
Defective	15	3%
Total	465	100%

 Table 4.2: Questionnaires returned for analysis

Source: Survey data: (2015)

## 4.2.3 Outliers Detection and Treatment

Screening of outliers was considered critical and necessary before conducting further analysis in this study because presence of extreme outliers may lead to failure of normality test and distorted statistics (Tabachnick & Fidell 2013). The study tested for outliers by checking the standard deviation as shown in Tables 4.3 below. All the items that had standard deviation below or above 3 were eliminated as outliers and the remaining ones put to further test. From the table, 450 items from 467 had their standard deviations with +- 3 and were put to further test since the standard deviation less than 3 from the mean indicated that most data are within the bell shape and the data was normally distributed.

	Descriptive		
	_	Statistic	Std. Error
Mean		2.10	.055
95% Confidence Interval for Mean	Lower Bound	1.99	
	Upper Bound	2.21	
5% Trimmed Mean		2.02	
Median		2.00	
Variance		1.354	
Std. Deviation		1.163	
Minimum		1	
Maximum		5	
Range		4	
Interquartile Range		2	
Skewness		.777	.115
Kurtosis		446	.230

# Table 4.3: Outlier table

Source: Survey data: (2015)

# 4.3 Demographic Profile of Respondents

This section discusses the demographic characteristics of the sample respondents in the study area. The demographic characteristics are done to give general information about the respondents. The background characteristics of the 450 respondents included gender, age, and marital status as presented in Table 4.4 below.

This information provides a base for further analysis of the specific research objectives and their findings using descriptive statistics, frequency tables and percentages. The information enlightens about the nature and stature of the respondents from which interpretation would be made. An examination of the responses for each of the 450 respondents pertaining to gender, age and marital status revealed the data in Table 4.4 below.

The study put into account the gender of the respondents. Knowledge about gender composition helps the researcher to know if gender had an effect on the outcome. From the results, 46.8% (210) of the respondents were female and 53.3% (240) of them were male. The results indicate that there is an almost equal representation of male and female respondents so both genders had a fair chance to share their knowledge so that the outcome information is diversified on the factors that contribute to the purchase of counterfeit products. This split is in line with the population split in Kenya.

Item/Variable	Categorization	Frequency	Percent (%)
Gender	Male	240	53.3
	Female	210	46.7
	Total	450	100
Age	18-24	194	43.1
	25-34	127	28.2
	35-44	78	17.3
	45-54	51	11.3
	Total	450	100
Marital Status	Married	243	54
Maritar Status	Single	207	46
	Total	450	100

 Table 4.4 : Demographic Profile for the Respondents

Source: Survey data (2015)

## 4.4 Descriptive Statistics of the Study

The purpose of descriptive statistics explained in this section is to quantitatively present the main features of the information collected about each of the variables of study. Garson (2012) opines quantitative analysis in all forms assumes thorough measurement which is relatively free from coding errors. Descriptive statistics help to give assurance that the data received is as anticipated in terms of means and standard deviations, and that there are no out - of-bound entries beyond the expected range. Descriptive statistics analyses were performed on all variables.

# **4.4.1 Descriptive Statistics for Social Cultural Factors**

Table 4.5 below presents the perceptions of employees regarding the Social cultural factors identified as important in determining attitude towards counterfeits. Social cultural factors were measured using 32 items in the four dimensions of materialism, subjective norms, value consciousness and moral intensity.

As seen below, the majority of the respondents agree with questions on social cultural factors (Trimmed mean 3.3216 and standard deviation of 1.148). These show that the majority of the people interviewed agree with the statements regarding social cultural factors.

 Table 4.5: Mean and standard deviation for Social cultural factors

Mean and SD for Social Cultural Factors		
SUBJECTIVE NORMS	Mean	S. D
How important are peers/colleagues approval for your purchases	3.07	1.293
How important are important friends approval for your purchase	3.14	1.303
How crucial is your parent's approval for your purchase of new items	3.17	1.388
How vital are your sibling's approval for your purchase of new items	3.16	1.340
People close to me allows me to purchase counterfeit products	2.14	1.308
MORAL INTENSITY		
I consider honesty as an important quality for one's character	4.180	1.200
I consider very important that people be polite	4.050	1.135
I admire responsible people	4.260	1.096
I like people that have self-control	4.320	1.081
VALUE CONCIOUSNESS		
The higher the price of the product, the higher the product quality	3.430	1.322
I always try to maximize value for money	3.870	1.081
I always check prices at store to be sure of value	3.780	1.127
The price of a product is a good indicator of its quality	3.470	1.230
You always have to pay a bit more for the best	3.850	1.094
I am concerned about low prices but also quality	3.910	1.029
I shop around for lower prices before I make a purchase	3.830	1.107
MATERIALISM		
The important achievements in life include acquiring material goods	3.420	1.312
I don't view the material objects people own as sign of success	3.040	1.285
The things I own say a lot about how well I'm doing in life	3.380	1.299
I like to own things that impress people.	2.850	1.341
I don't pay much attention to the material objects other people own	3.030	1.278
MATERIALISM-Centrality		
Typically, I only purchase items that I need.	3.22	1.312
I strive to keep my life simple in terms of goods.	3.32	1.278
The stuff I own is not really essential to me.	2.54	1.288
I like spending money on impractical items.	2.16	1.280
Purchasing something provides me with great joy.	3.00	1.265
I enjoy a high level of luxury in my life.	2.83	1.284
I value material possessions less than most people I know	3.08	1.274
MATERIALISM-Happiness		
I have all the things I really need to enjoy life.	2.390	1.226
My life would be better if I owned certain things I don't have	3.510	1.301
I'd be happier if I could afford to buy more things.	3.590	1.284
It bothers me that I can't afford all the things I would like	3.490	1.289
Source: Survey data (2015)		

# 4.4.2 Descriptive Statistics for Attitude

Table 4.6 below presents the perceptions of the respondents regarding the respondents in terms of their attitude towards counterfeits. Eleven (11) items were considered in measuring attitude towards counterfeits, with scales developed from earlier studies. As the table shows, the majority of the respondents had mean ranging from 1.8 to 2.4 and standard deviation for all was within the cut off  $\pm 2$  indicating that there was an average agreement on all questions pertaining to attitude and that most of the respondents agree that attitude affects purchase Intention. The results on whether counterfeits are practical had the highest mean 2.6 with standard deviation of 1.26.

Items	Mean	Std. Dev.
In general, the quality of counterfeits is satisfactory.	2.10	1.163
I have a favorable opinion of counterfeit items.	1.79	1.115
While purchasing, it is preferable to purchase counterfeit items.	1.83	1.135
There is nothing improper about buying counterfeit items.	1.98	1.146
I am interested in purchasing counterfeit items.	1.85	1.094
In general, counterfeits are practical.	2.58	1.257
In general, counterfeits are trustworthy.	2.28	1.253
It is easy for me to buy/use counterfeit goods.	2.21	1.201
Purchasing counterfeit goods is advantageous for the customer.	2.26	1.260
I am pleased to purchase or utilize counterfeit goods.	1.89	1.131
I feel no guilt in purchasing or using counterfeit goods.	2.35	1.361

Table 4.6: Mean and Standard Deviation for Attitude towards counterfeits

**Source:** *Survey data*, (2015)

## 4.4.3 Descriptive statistics for consumer knowledge

The table below presents perceptions of the respondents regarding their knowledge of mobile phones and ability the authenticity of a mobile phone. Consumer knowledge was measured by 8 items. As seen most respondents agreed with the statement about consumer knowledge that: I feel very knowledgeable about phones (Mean 3.39, standard deviation 1.096), I can give people advice about different brands of phones (Mean 3.30, standard deviation 1.145), I only need to gather very little information in order to make a wise decision(Mean 3.19, standard deviation 1.264), am confident about my ability to tell the difference in quality between different brands of phones (Mean 3.5, standard deviation 1.113), Compared to an average person, I know a lot about mobile phones( Mean 3.41, standard deviation 1.107), My friends consider me

as an expert on mobile phones (mean 3.06, standard deviation 1.228), can easily tell the difference between a counterfeit phone and a real one (mean 3.42, standard deviation 1.185), I can tell the value I can get from a counterfeit phone as compared to a real one (mean 3.44, standard deviation 1.97).

 Table 4.7: Mean and Standard Deviation for consumer knowledge

Item	Mean	Std dev.
I am very knowledgeable about mobile phones.	3.39	1.096
I am able to provide recommendations concerning phone brands.	3.30	1.145
I need only little information to make a prudent choice.	3.19	1.264
Am confident on my ability to differentiate phone quality/brand	3.45	1.113
Compared to an average person, I know a lot about mobile phones	3.41	1.107
My friends consider me a mobile phone specialist.	3.06	1.228
I can easily differentiate between a counterfeit and a real one	3.42	1.185
I can tell the worth of a counterfeit phone versus a genuine one.	3.44	1.197
Source: Survey data, (2015)		

# 4.4.4 Descriptive Statistics for Purchase Intention

Purchase intention was measured using 5 items borrowed from earlier research. The data presented below (Table 4.8) shows that the response to various perceptions about Purchase intention had mean between 2 and 2.3 on a likert scale of 5 and a standard deviation below 2 which indicated all constructs could explain some part of Purchase intention. The question of if one would think about counterfeit had a mean of 2.23 and standard deviation of 1.2 while if one would recommend to friends to but counterfeits had the lowest mean 1.93 with a standard deviation of 1.16.

Table 4.8	Purchase	Intentions
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Items(s)	Mean	Std. Dev
There is a possibility that		
I will think about counterfeits as a choice when buying	2.23	1.199
Buy counterfeit product	2.15	1.179
Recommend to friends and relatives to buy counterfeits	1.93	1.160
Recommend to friends and relatives to buy counterfeit phone	1.96	1.218
Say favorable things about counterfeits	2.07	1.276

**Source;** *Survey data* (2015)\

## 4.4.5 Summary of Descriptive Statistics for the Constructs

This subsection provides data on consumer social cultural factors (SCF), Attitude (ATT), Consumer knowledge (CK) and Purchase intention (PI). Mean, standard deviation, skewness, and kurtosis have been used to explain the data. Table 4.9 below presents a summary of the statistics for the study's variables, with all variables having a mean score ranging from 3.26 to 3.35 and standard deviation of less than 0.5 on a 5 point likert scale. This indicates that respondents agree that the parameters of social cultural factors, attitude and consumer knowledge have a bearing on their intention to purchase.

**Table 4.9: Summary Statistics of Descriptive** 

Variables	Mean	Std. Dev	Min	Max	Range	Skewness	Kurtosis
SCF	3.327	.348	2.08	4.30	2.23	0.34	0.209
Attitude	3.263	.413	2.0	4.91	2.91	.758	.117
Consumer Knowledge	3.353	.420	2.0	5.0	3.0	.393	-0.338
Purchase Intention	3.34	.402	2.0	4.5	2.5	.472	392

**Source Research Data**(2015)

# 4.5 Reliability Analysis

The variables were tested for reliability by calculating the Cronbach's Alpha. The results in Table 4.10 below indicated a strong internal consistency among measures of variable items. Specifically the findings indicated that Social cultural factors (SCF), Attitude (ATT), Purchase intention (PI), and consumer knowledge (CK) had a computed Cronbach's alpha above 0.7. For instance, Social cultural factors had a Cronbach alpha of 0.835 of Attitude 0.83, Purchase Intention 0.865, and consumer knowledge the moderator 0.892.

These acquired reliability indices for the variables are sufficient and show that any other researcher may duplicate the study and receive comparable findings.

Variable	No. of items	Cronbach's Alpha	Standardized Cronbach's Alpha
Social Cultural Factors(SCF)	32	0.832	0.835
Attitude (ATT)	11	0.828	0.849
Purchase Intention (PI)	5	0.865	0.865
Consumer knowledge (CK)	8	0.887	0.889

 Table 4.10: Summary of Reliability Statistics for All Variables

Source: Survey data: (2015).

#### 4.6 Factor Analysis

Before testing the hypotheses, factorability of the items of the study were examined to identify a small number of items which would be used to test the relationship among interrelated variables, and also to investigate the validity of each construct through measurement purification process. Items with factor loadings less than 0.5 were omitted from the analyses to increase construct validity. The analyses conducted identified a few latent components in the data constructions that accounted for a large portion of original data and to prepare the data for regression analysis. Key drivers of constructs can be identified by doing an analysis. It is important to use Factor Analysis in research to test for construct validity, as well as to check for any associated variables in order to eliminate redundancy in data. Principle component analysis (PCA) was used to extract the components, and the results revealed the collection of factors responsible for all of the data's common and unique variance (Idinga 2015). Only variables with Eigenvalues greater than one were considered for further analysis. orthogonal rotation was chosen as the extraction method because results from such a rotation are more likely to be duplicated in future studies, there is less sampling error, and the results are more concise,. The Kaiser-Meyer-Olkin Measure of Sampling Adequacy was used to confirm the factors' suitability for factor analysis before they were analyzed.

# 4.6.1 Assessment Adequacy of the data for Factorability.

Both the Barttlet test of Sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sample adequacy were deployed to assess the data's factorability. The Kaiser-Meyer-Olkin scales from 0 to 1 and measures sampling adequacy. This statistic shows how much of the variation in the variables may be due to underlying causes and where there may be issues with partial correlations. Since a score near 0 indicates strong partial correlations, component analysis is not appropriate. The values that are nearer to 1 are better indicators of this variance and sample adequacy, with a value of 0.6 being recommended as the minimal sign that the data has passed the KMO test. The Bartlett's Test of Sphericity is a test that determines whether or not the correlation matrix has an identity matrix, which would mean that the variables are unrelated and hence inappropriate for structure discovery. To determine if samples come from populations with similar variances, the test is utilized. Taking this into account, these tests provide the bare minimum required to go further with Factor Analysis.

# 4.6.1.1 Kaiser-Meyer-Olkin (KMO) and Bartlett's Test

The Kaiser-Meyer-Olkin (KMO) Test evaluates the data's suitability for factor analysis. The test evaluates the model's overall sampling efficiency as well as the sampling efficiency for each variable. KMO has a range of 0 to 1. The statistic is a representation of how much of the variation among the variables may be common variance. A score that approaches 1 indicates compact patterns of correlation, which makes the factor analysis accurate and suitable for the investigation. In order to determine if the research variables are unrelated and hence inappropriate for structure detection, Bartlett's test of Sphericity is used to test the hypothesis that the correlation matrix is an identity matrix. The test determines whether there is a substantial divergence between the identity matrix and the observed correlation matrix.

# **4.6.2 Factor Analysis on Social Cultural Factors**

The Kaiser-Meyer-Olkin (KMO) for SCF had a measure of 0.806, which is above the threshold of 0.6 (Field, 2009). The Bartlett's test was significant in this study with chi square  $\chi^2 = 4437.262$  (p-value, 0.000). Therefore, the KMO value of 0.806 and significance of Bartlett's statistic confirmed the appropriateness of the factor analysis for the data set. Consequently the thirty two measures of SCF were subjected to factor analysis and the results show that there were eight critical factors driving SCF, which accounted for 61.4% of the total variance.

Tables 4.12 below shows the factor loading for each item, and they are arranged by size. Any item that fails both to meet the criteria of having a factor loading value of greater than 1 and to load on more than one factor would be dropped from the study (Liao, Fei & Chen, 2007).

The table shows that 32 items are sorted and clustered into eight components: The eigenvalue for each factor is greater than 1.0 (3.748, 3.398, 2.979, 2.360, 2.324, 1.808, 1.541 and 1.491) which implies that each factor can explain more variance than a single variable. The cumulative percentage of variance explained by the eight factors is 61.41 per cent. In other words, more than 61 per cent of the common variance shared by 32 items can be accounted for or explained by these eight factors. Based on above results, the construct validity is established and the eight variables were chosen to describe SCF and where therefore put in for further analysis.

KMO and Bartlett's Test						
Kaiser-Meyer-Olkin Measure of Sample	ling Adequacy.	.806				
Bartlett's Test of Sphericity	Approx. Chi-Square	4437.262				
	Do	496				
	Sig.	.000				

# Table 4.10: Factor Analysis on Social-Cultural Factors

**Source:** *Survey data:* (2015)

# **Table 4.11: Total Variance on Social cultural Factors**

			l Variance Exp	olained		
Component	Ι	nitial Eigenva	lues	Rotation S	Sums of Squar	ed Loadings
	Total	% of	Cumulative	Total	% of	Cumulative
		Variance	%		Variance	%
1	6.005	18.766	18.766	3.748	11.714	11.714
2	3.859	12.060	30.826	3.398	10.617	22.331
3	2.183	6.821	37.647	2.979	9.311	31.642
4	2.088	6.524	44.171	2.360	7.376	39.018
5	1.721	5.379	49.550	2.324	7.263	46.281
6	1.366	4.270	53.820	1.808	5.649	51.930
7	1.269	3.967	57.787	1.541	4.815	56.745
8	1.158	3.618	61.405	1.491	4.660	61.405
9	.986	3.081	64.486			
10	.960	3.000	67.486			
11	.904	2.826	70.312			
12	.826	2.580	72.891			
13	.779	2.433	75.325			
14	.733	2.289	77.614			
15	.719	2.248	79.862			
16	.640	2.001	81.863			
17	.638	1.994	83.857			
18	.539	1.686	85.543			
19	.508	1.588	87.131			
20	.480	1.500	88.631			
21	.434	1.355	89.986			
22	.409	1.279	91.264			
23	.395	1.235	92.500			
24	.374	1.170	93.670			
25	.359	1.121	94.790			
26	.333	1.042	95.832			
27	.313	.978	96.810			
28	.275	.860	97.669			
29	.244	.762	98.431			
30	.188	.587	99.018			
31	.164	.512	99.531			
32	.150	.469	100.000			

Extraction Method: Principal Component Analysis. **Source**: *Survey data* (2015)

Table 4.13 below depicts the rotated component factor loadings for SCF as a driver of consumer attitude.

QUESTIONNAIRE ITEM				FACT	OR LOAI	DING		
	1	2	3	4	5	6	7	8
I consider honesty an important quality for one's character	.839							
I consider very important that people be polite	.800							
I admire responsible people	.876							
I like people that have self-control	.813							
Importance of the following Peers/colleagues opinion		.791						
Importance of Friends opinion in purchasing		.863						
Importance of Parents opinion in purchasing		.871						
Importance Sibling opinion		.894						
The higher the price, the higher the product quality		<u>.</u>	725					
I always try to maximize value for money in purchasing		-	.594					
I always check prices at the store to be sure of value			.599					
The price of a product is a good indicator of its quality			.725					
You always have to pay a bit more for the best			.705					
I am very concerned about prices but also Quality			.537					
My life would be better if I had certain things I lack		÷		777				
I'd be happier if I could afford to buy more things.				.751				
It bothers me that I can't afford to buy all things I want				.834				
The things I own indicate how well I'm doing in life					0.616			
I like to own things that impress people.					0.708			
Buying things gives me a lot of pleasure.					0.615			
I like a lot of luxury in my life.					0.660			
The things I own aren't all that important to me.						0.629		
I have all the things I really need to enjoy life						0.587		
I usually buy only the things I need.							0.762	
I keep my life simple in matters of possessions							0.625	
Material objects people own are not a sign of success								.763
I don't give much attention to the materials other people own								.729

 Table 4.12: Summary of principle component analysis for Social cultural factors

# 4.6.3 Factor Analysis on consumer attitude

The eleven measures of consumer attitude were subjected to factor analysis to check whether all of them were suitable for measuring the variables that they were conceptualized to measure. Before the factor analysis a Kaiser-Meyer-Olkin measure of sampling adequacy was carried out.

Results in table 4.14 shows KMO measure on Attitude had 0.921 and Bartlett's test of Sphericity was significant (chi-square  $\chi^2=2116.413$ , p<0.000), which represented great acceptability of the use of factor analysis (small P value for Bartlett's Test of Sphericity (less than 0.05). The KMO value indicated that the sampling was adequate, and the data was suited for factors analysis.

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure o	of Sampling Adequacy.	.921
Bartlett's Test of Sphericity Approx. Chi-Square		2116.41
· ·	Df	55

Sig.

 Table 4.13: KMO and Bartlett test on Consumer attitude

**Source**: Survey data (2015)

Factor analysis was done on all the 11 factors hypothesized to inform attitude and arranged by size. Any item that fails to meet the criteria of having a factor loading value of greater than1 and load on more than one factor would be dropped from the study (Liao, et al., 2007). From Table 4.15 below, the factors loaded into two components with Eigen values of 5.588 and 1.001 respectively which accounted for 60% of the variation on consumer attitude. Out of all the questions in the questionnaire, the one with highest factor loading of all is the one saying "I have a positive perception towards counterfeit goods" (0.833) while the one with highest loading in component 2 was to buy counterfeits is guiltless (0.717). These two factors

3

.000

were estimated to represent the extracted components of Attitude and would be taken

forward for further analysis

Rotated Component Matrix for attitude	Component	
Questionnaire item	1	2
I have a positive perception towards counterfeit goods	.833	
While shopping, buying counterfeit goods is a better choice	.795	
It would be desirable for me to buy counterfeit goods	.747	
There's nothing wrong with purchasing counterfeit goods	.658	
Generally speaking, counterfeits have satisfying quality	.641	
For me to buy/use counterfeits is proud.	.541	
For me to buy/use counterfeits is guiltless		.717
Generally speaking, counterfeits are practical.		.714
Generally speaking, counterfeits are reliable.		.676
Generally speaking buying counterfeits benefits the consumer		.596
For me to buy/use counterfeits is convenient.		.567
Extraction Method: Principal Component Analysis. Rotation Method: Varimax with Kaiser Normalization.		

# **Table 4.14: Consumer Attitude Factor Loadings**

Source: (Survey data 2015)

Total Variance Explained					
I	Initial Eigenvalues Rotation Sums of Squared Loadings			-	
Total	% of	Cumulative	Total	% of	Cumulative
	Variance	%		Variance	%
5.588	50.797	50.797	3.768	34.259	34.259
1.001	9.096	59.893	2.820	25.634	59.893
.784	7.131	67.024			
.702	6.379	73.403			
.589	5.354	78.757			
.499	4.536	83.293			
.470	4.273	87.567			
.403	3.668	91.234			
.355	3.230	94.464			
.324	2.946	97.410			
.285	2.590	100.000			
	Total 5.588 1.001 .784 .702 .589 .499 .470 .403 .355 .324	Initial Eigenv           Total         % of Variance           5.588         50.797           1.001         9.096           .784         7.131           .702         6.379           .589         5.354           .499         4.536           .470         4.273           .403         3.668           .355         3.230           .324         2.946	Initial EigenvaluesTotal% of % of VarianceCumulative %5.58850.79750.7971.0019.09659.893.7847.13167.024.7026.37973.403.5895.35478.757.4994.53683.293.4704.27387.567.4033.66891.234.3553.23094.464.3242.94697.410	Initial Eigenvalues         Rotat           Total         % of Variance         Cumulative %         Total           5.588         50.797         50.797         3.768           1.001         9.096         59.893         2.820           .784         7.131         67.024           .702         6.379         73.403           .589         5.354         78.757           .499         4.536         83.293           .470         4.273         87.567           .403         3.668         91.234           .355         3.230         94.464           .324         2.946         97.410	Initial Eigenvalues         Rotation Sums of Loadings           Total         % of         Cumulative         Total         % of           Variance         %         Variance         Variance           5.588         50.797         50.797         3.768         34.259           1.001         9.096         59.893         2.820         25.634           .784         7.131         67.024         702         6.379         73.403           .589         5.354         78.757         499         4.536         83.293         470         4.273         87.567           .403         3.668         91.234         355         3.230         94.464         324         2.946         97.410

# Table 4.15: Total Variance Explained on consumer attitude

Extraction Method: Principal Component Analysis. **Source**: *Survey data: (2015)* 

# 4.6.4 Factor Analysis on Purchase Intention

The KMO test was used to determine if the data was enough for factor analyses before factor analysis on the purchase intention was performed. The Bartlett's Test of Sphericity demonstrated significance with a Chi Square ( $\chi^2$ ) of 1202.4 at P<.01, however the KMO test (Table 4.17) demonstrated that the data were acceptable for Factor analysis since the KMO score was 0.801. Given that the factors were not a matrix of identities; this suggested that the data was suitable for factor analysis.

Kaiser-Meyer-Olkin Measure	.801	
Bartlett's Test of Sphericity Approx. Chi-Square $(\chi^2)$		1202.384
	Df	10
	Sig.	.000

Table 4.16: KMO TEST and Bartlett's test for Purchase Intention

Source: Survey, data (2015)

To investigate the dimensionality of Purchase Intention and determine if all the factors were relevant to Purchase Intention, a Principal Component Analysis with varimax rotation was conducted on the five (5) Purchase Intention measures. The second goal was to collect the common elements and keep just a few of those that had the greatest impact (Noor, Chen, & Romiza, 2011). As they demonstrate that several factors may explain more variation than a single variable. Only components with eigenvalues greater than 1.0 would be kept.

The variation explained for the dependent variable purchase intention is shown in Table 4.18. Only one component was retrieved from the component analysis with varimax rotation of the five (5) elements that were thought to explain purchasing intention. This component had an Eigen value more than 1 (3.276) and explained 65.5 percent of the variation in purchase intention, which indicates it could account for 65.5 percent of the common variance across the five components with the original

factors loaded into it to varying degrees. The name of the component retrieved was selected based on the element that contributed the most to the component (Recommend to friends and family that they purchase a counterfeit phone=0.889). Therefore, in the study that followed, that component served as a proxy for purchase intention.

Questionnaire item	Factor loading
Think about a counterfeited product as a choice when buying something	.655
Buy a counterfeited product	.758
Recommend to friends and relatives that they buy a counterfeit product	.880
Recommend to friends and relatives that they buy a counterfeited phone	.889
Say favorable things about counterfeit phones	.841

 Table 4.17: Summary of Principle component analysis for Purchase Intention

Table 4.18: Total Variance I	<b>Explained on Purchase Intention</b>
------------------------------	--

Total Variance Explained						
Component	Component Extraction Sums of Squared Loadings					
Total% of VarianceCumulative %						
1	3.275	65.492	65.492			
Extraction Method: Principal Component Analysis.						
D D	1 (2015)					

Source: Survey data (2015)

# 4.6.5 Factor Analysis on Consumer Knowledge

A Principal Component Analysis with Varimax rotation was performed on eight (8) factors that explained Consumer knowledge. Before PCA a Kaiser-Meyer-Olkin measure of Sampling Adequacy was run on the data to check its adequacy for factor analysis. The Bartlett's Test of Sphericity results showed that the data was adequate for factor analysis since the KMO was almost 1 (0.895) and significant Chi Square ( $\chi^2$ ) of 1702 (at P<0.01) as shown in table 4.20 below.

KMO and Bartlett's Test on consumer Knowledge					
Kaiser-Meyer-Olkin Measure of Sampling Adequacy895					
Bartlett's Test of Sphericity	1701.882				
	28				
Sig000					

 Table 4.19:
 KMO and Bartlett's Test on Consumer Knowledge

**Source**: Survey data (2015)

In order to assess the construct validity, the 8 items were examined by principal components extraction with varimax rotation to check loading for each item and the results therein arranged in descending order by size. The minimum criteria for a factor to be considered is that the loading should be greater than 1 Eigen Value and load on more than one factor (Liao et al., 2007)

The results of the PCA extracted one component with Eigen value more than 1(4.585). This factor explained about 57.3% of the variance in consumer knowledge with all other factors loading to it. (Table 4.21 below and figure 4.1). This shows that 57.3% of the common variance is explained by this one factor. To understand the name of the new factor (component), we checked the factor with the highest factor loading. The question on whether one is good in giving people advice about different brands of phone had the highest factor loading (0.832) and as such was extracted to represent the new component

Questionnaire item	Factor loading
I feel very knowledgeable about phones	.730
I can give people advice about different brands of phones	.832
I need to gather very little information in order to make a wise decision	.488
I can confidently tell differences of quality different brands of phones.	.815
Compared to an average person, I know a lot about mobile phones	.830
My friends consider me as an expert on mobile phones	.805
I can easily tell the difference between a counterfeit and a real phone	.795
I can tell the value derived from a counterfeit as compared to a real phone	.699
Source: Survey data, (2015)	

 Table 4. 20 Table of factor loadings for consumer knowledge.

Total Variance Explained				
Component Extraction Sums of Squared Loadings				
	Total	% of Variance	Cumulative %	
1	4.585	57.317	57.317	
Extraction Method: Principal Component Analysis				

Extraction Method: Principal Component Analysis. **Source**: *Survey data*, (2015)

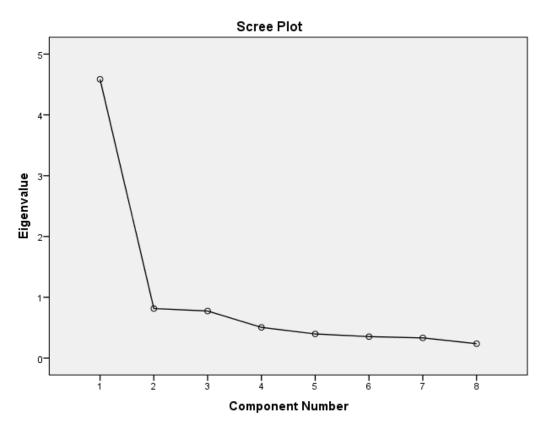


Figure 4.1: Variance on consumer Knowledge

## **4.7** Correlation Analysis of the Study Variables

To establish the relationship between the variables of the study, Pearson's Correlation (Hair et al 2013 and Field 2009), analysis which is a measure of linear association between two variables was used. The test was done to identify the strength and direction of the associations among the variables of the study. According to (Gogtay & Thatte, 2017), correlation is a term used to indicate the correlation or relationship between two or more quantitative variables. It also measures the strength or magnitude of the association between the variables and their direction. The value of the coefficient can range from -1 to +1, which shows a positive or negative correlation. In this study, Pearson's Correlation was used to analyze the co-variation of Purchase Intention of counterfeits and the three variables Social Cultural Factors, Attitude and Consumer knowledge. Bivariate correlations were computed in this research using the Pearson r statistic. According to Hair et al., (2006) no correlation (variables not connected) is indicated by values between 0 and 0.3 (0 and -0.3), a mild positive (negative) linear connection is indicated by values between 0.3 and 0.5 (-0.3 and -0.5), and so forth. A moderately positive (negative) linear connection is indicated by values between 0.5 and 0.7 (-0.5 and -0.7), while a significant positive (negative) linear correlation is indicated by values between 0.7 and 1.0 (-0.7 and 1.0). A probability value of less than 0.025 indicates a statistically significant association, which is assessed at a 95% confidence level using a 2-tailed test. As a consequence, the result suggests the existence of a link since the likelihood of getting such a correlation coefficient by chance is less than 2.5 times out of 100.

Results in Table 4.23 present the correlations for the study variables. The independent variable Social cultural factor correlated strongly with Purchase Intention (r = 0.579, p < 0.01), with Attitude the mediator (r = 0.415, p < 0.01), and strongly with Consumer

Knowledge (r = 0.523, p < 0.01). Attitude correlated strongly with Purchase intention (r = 0.427, p < 0.01) and moderately with consumer knowledge (r = 0.393, p < 0.01). Consumer Knowledge correlated very well with Purchase intention (r = 0.77, p < 0.01).

		PI	SCF	ATT	СК
PI	Pearson Correlation	1			
SCF	Pearson Correlation	$.579^{**}$	1		
ATT	Pearson Correlation	.427**	.415**	1	
CK	Pearson Correlation	$.770^{**}$	.523**	.393**	1
**. Corr	elation is significant at the (	0.01 level **	p < 0.01, *p	< 0.05 (2-taile	ed). N = 450.
Source:	Survey data (2015)				

 Table 4. 22 Correlations of study variables

These findings revealed existence of a linear association between the independent variable constructs and the dependent variable. SCF has a positive and significant correlation with Purchase Intention (r =.579; p <.01), implying that there is 57.9% chance that PI will increase with increase in SCF. The results also reveal that Attitude has a positive and significant correlation with PI (r =.427; p <.01) which implies that there is 42.7% chance that PI will increase with an increase in Attitude. Finally, Consumer Knowledge has a positive and significant correlation with Purchase Intention (r =.770; p <.01). Thus, there is 77% chance that Purchase Intention will increase with increase Consumer Knowledge. The highest correlation was between Consumer Knowledge and Purchase Intention 0.77 and the lowest was between Attitude and Purchase Intention (.427). This confirms that all the hypothesized relationships were significant at p < 0.01.

# 4.8 Testing For Control Effects on the Study

The researcher also examined the correlation between Purchase Intention and the various demographic variables used in the study to see if the control variables have

any effect on the dependent variable in comparison with direct effects (Creswell 2008). As seen below the total effect of the control effects on the dependent variable was only 0.05 ( $r^2$ =0.05) which indicates that 0.05 of variation in purchase intention was because of a combined effect of Age, Gender and marital status. The F value was (0.800 p>0.05) which revealed that there was no significant contribution of the control variables on the independent variable. The researchers found no relation between gender or marital status and purchase intentions which is consistent with studies by (O'Cass & McEwen, 2004) who did not find a relationship between gender and status consumption. These results suggest that demographic variables are not the most effective in explaining differences in counterfeit consumption.

#### Table 4.23: Model Summary

Model	R	R		Adjusted R Square	Std. Error of
		Squa	are		the Estimate
	.073 <sup>a</sup>	.00	5	001	.40157
Change S	Statistics				
R <sup>2</sup> Change	F Change	df1	df2	Sig. F Change	
.005	.800	3	.446	.494	

Source: Survey data (2015)

<b>Table 4.24:</b>	Co Efficient	Summary fo	or Control	Effects
--------------------	--------------	------------	------------	---------

	Unstandar	dized Coefficients	Standardized Coefficients	Т	Sig.
	В	Std. Error	Beta		
(Constant)	3.313	.084	018	39.578	.000
Gender	014	.038		368	.713
Age	.036	.026	.081	1.394	.017
M	015	.047	019	327	.744

a. Dependent Variable: PIELD

Source: Survey data (2015)

# 4.9 Test of assumptions of Multiple Regression analysis

To ensure the data meets the assumptions of multiple regressions and especially correlation and regression analysis, the researcher subjected the data to assumptions of the regression model to ensure that results from the study are trustworthy which ensures there is minimal chance of Type I or Type II error, or over- or underestimation of significance or effect size. Knowing the assumptions of multiple regressions in the context of a particular dataset and analysis is an important prerequisite to the drawing of trustworthy conclusions from data, (Horrace, Huang, & Perloff, 2009). To this extend the Tests of Linearity, Normality, Homoscedasticity and multicollinearity were done as detailed below.

# 4.9.1 Test of linearity

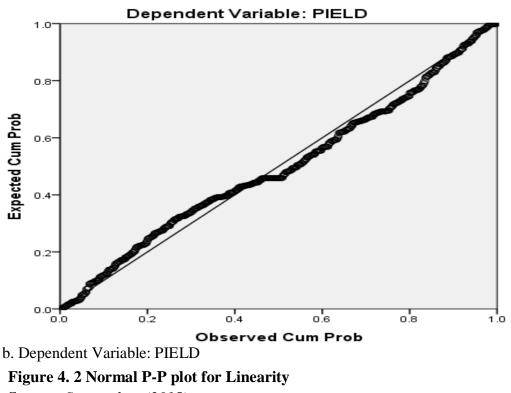
The first assumption of regression is that all independent variables should have a linear relationship with the dependent variable because as argued by (Garson, 2012; Osborne & Waters, 2002) the standard multiple regressions can only accurately determine the relationship between dependent and independent variables if the relationship is linear in nature. Linearity test was done to confirm if the mean of the Criterion variable is a linear combination of the regression co efficient and the predictor values. Linearity assumption was examined through the use of simple inspection of P-P plot (Figure 4.2) of the scores represented by a straight line (Pallant, 2013) and also proved through coefficient of determination ( $\mathbb{R}^2$ ) which at 0.642 indicates that the model explains 64.2% of the variance in the independent variable and it's statistically significant.

# Table 4.25: Model Summary

# Model SummaryModelChange Statistics $R^2$ ChangeF Change $.642^a$ 266.971266.9713446.000

a. Predictors: (Constant), CKELD, ATTELD, SCF

114



Normal P-P Plot of Regression Standardized Residual

# Source: Survey data (2015)

# **4.9.2** Test of Normality

Checking data for normalcy ensured that any errors in prediction about the dependent variable's value were dispersed about normally in this investigation (Ghasemi & Zahediasal, 2012).

In order to make valid inferences from obtained regression results, the residuals of the regression should follow a normal distribution. The residuals are the error terms, or the differences between the observed value of the dependent variable and the predicted value. This can be done by examining a normal Quartile-Quartile (Q-Q) **plot.** If they are normally distributed, they will conform to the diagonal normality line indicated in the plot



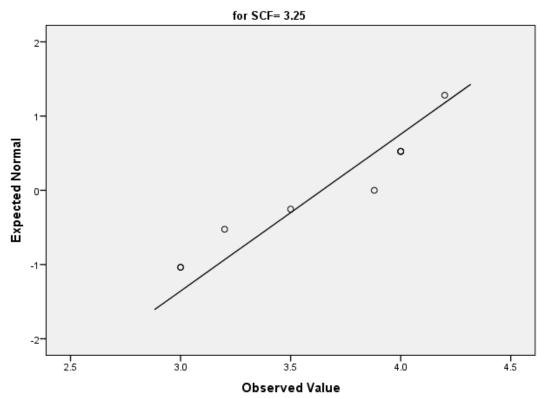


Figure 4.3: Assessment of data Normalcy

Based on the regression standardized residual indicated by Figure 4.3 above, the observed and expected did not show any significant departure from the diagonal line hence assumptions of normality were fulfilled.

Skewness & kurtosis were also used to determine whether or not the distribution was normal. According to Kline (2011); Tabachnick & Fidell (2013a) skewness measures the symmetry of a distribution while kurtosis is used to measure the peakedness of a distribution. The values of skewness and kurtosis of the study variables indicated in Table 4.27 reveal that the data was normally distributed where the skewness values were in the range of 0.340 to 0.758 while the value for kurtosis ranged from -.392 to 0.209, both of which are within the threshold recommended by Kline 2011) of -3 to +3,

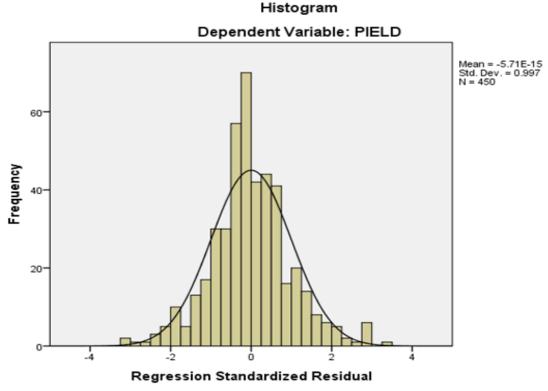
N=450	Mean	Std Deviation	Skewness	Kurtosis
ATTELD	3.2628	.41343	.758	.117
PIELD	3.3395	.40130	.472	392
CKELD	3.3525	.41928	.393	338
SCF	3.3272	.34765	.340	.209

 Table 4.26: Normality test (skewness and kurtosis)

Valid N (listwise)

**Source**: Survey data (2015)

Additionally, normality was also tested using Histogram Figure 4.4 below. According to Garson (2012) the histogram of standardized residuals should show a roughly normal curve when the assumption of regression and most other techniques are met that error terms are normally distributed. The author states that in any predictive technique shape and spread of distributions in the data is an indicator of the normalcy of the data, with the largest number of error terms and predictions being at or near zero and then trailing off into "high prediction" and "low prediction" tails.



**Figure 4.4: Normality Histogram** 

In addition meeting the normality tests, this study used PROCESS Macro which uses bootstrapping and as such normality of data is not mandatory (Hayes 2018) with 5000 number of bootstrap samples. Bootstrapping is a computer-intensive, non-parametric approach to statistical inference. Instead of making assumptions about the distribution of sampling statistics, bootstrapping uses variability within a sample to estimate the distribution of sampling empirically. This is done by randomly resampling with replacement from the sample many times in a way that mimics the original sampling scheme and allows for consistent computation of intervals for the sampling distribution regardless of the underlying distribution (Lavrakas, 2008)

# 4.9.3 Test of Homoscedasticity

Data is tested to ensure its homoscedastic rather than heteroscedastic. Homoscedasticity exists when at each level of the predictor variable, the variance of the residual terms is constant (Schützenmeister, Jense, & Piepho, 2012)

Homoscedasticity implies that the relationship under analysis is the same for the entire spectrum of the dependent variable. The absence of homoscedasticity is indicated by higher errors (residuals) in some portions of the range compared to others. When the homoscedasticity assumption is met, residuals will form a pattern-less cloud of dots (Garson, 2012). This is also supported by (Osborne & Waters, 2002), who states that residuals should lie between -2 and/or +2 points.

The scatter graph (Figure 4.5) below shows that residuals are spread equally along the ranges of predictors. It shows a pattern that would indicate that an horizontal line along zero(0) would have equally spread points on either side which indicates that the variability (variances) of the residual points is constant when fitted on the value of

the fitted outcome variable, suggesting constant variances in the residuals errors hence homoscedasticity.

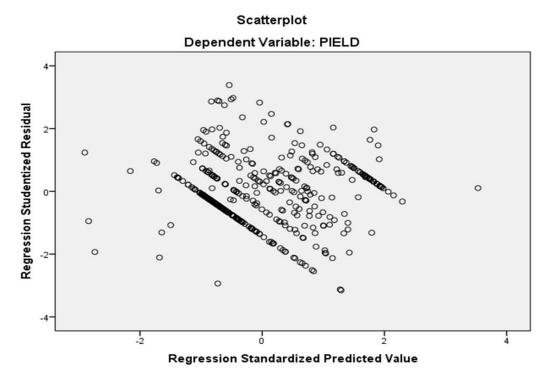


Figure 4. 5: Scatter plot for Homoscedasticity

# 4.9.4 Test of Multi collinearity

In this study multicollinearity was examined by tolerance and its reciprocal variance inflation factor (VIF). The test is that if the tolerance value is more than 0.1 and VIF is less than 10 then no multicollinearity problem is deemed to have occurred (Ott & Longnecker, 2001).

According to Garson (2012), if the tolerance value is less than cut off value 0.20, the independent variable should be dropped from the analysis due to multicollinearity. For VIF, the rule of thumb is that if the value of VIF > 4.0, then there would a multicollinearity problem. From Table 4.28 the tolerance ranges between 0.675 and 0.785 substantially greater than 0.20 while VIF ranges from 1.274 to 1.482 well below the 4.0 cut off suggested by Garson (2012) and (Hair, Anderson, Babin, & Black 2010).

Mod	el		ndardized fficients	Standardized Coefficients	t	Sig.	Collinea Statist	•
		В	Std. Error	Beta			Tolerance	VIF
1	(Constant)	.223	.123		1.809	.071		
	ATT	.091	.031	.093	2.923	.004	.785	1.274
	SCF	.250	.040	.217	6.285	.000	.675	1.482
	CK	.593	.033	.620	18.16	.000	.689	1.451

 Table 4.27:
 Multi Collinearity Coefficients

a. Dependent Variable: PI

Source: Survey data (2015)

# 4.10 Regression Analysis

Regression analysis measures the nature of the relationship between the dependent and independent variables but also tests the model fit to establish the predictive power of criterion variable in the Models. The analysis helps to reveal how the conceptualized independent variables contribute to the variation in dependent variable (Hair et al., 2009; Solimun & Fernandes, 2017). This study used hierarchical and multiple regression model using Hayes (2018) Process Macro in testing the hypotheses.

# **4.11 Testing of Hypothesis**

Testing hypothesis is categorized in terms of testing for both the direct and indirect hypothesis. The direct hypothesis tested the direct effect of Social cultural factors (SCF) on and the independent Variable Purchase Intention (PI), Social Cultural Factors (SCF) on Attitude and the effect of attitude on Purchase Intention of counterfeits. Hierarchical regression analysis was used to test the direct effect hypothesis, multiple regression models using Hayes (2018) Model 4 to test for mediation and Hayes Model 1 to test for moderation and finally Hayes Process Model 14 to test mediation hypotheses.

According to Mueller et al. (2005), establishing moderated mediation requires estimating parameters for three statistical models, mediation, moderation and moderated mediation.

# **4.11.1 Testing the Hypothesis for Direct Effect**

# 4.11.1.1 Effect of Social Cultural Factors on Purchase Intention (Ho1)

Hypothesis (H<sub>01</sub>) stated that social cultural factors have no significant effect on Purchase intention of counterfeits. The results in table 4.29 below shows that Social cultural factors have positive and significant effect on purchase intention of counterfeits ( $\beta$ =0.579, P<0.05). The standardized Beta value of 0.579 implies that with every unit increase in Social Cultural factors, Purchase intention of counterfeits increases by 0.579 units indicating that SCF explains up to 58% of the variation in Purchase intention of counterfeits. Therefore hypothesis H<sub>01</sub> was rejected.

The hypothesized model was found to fit well in the analysis since the adjusted  $r^2$  was 0.334, (Table 4.30) as well as significant in predicting the equation F (1,448) = 226.5, P<0.05

		Coefficient	8		
Model	Unstar	ndardized	Standardized	t	Sig.
	Coef	ficients	Coefficients		
-	В	Std. Error	Beta		
(Constant)	1.114	.149		7.492	.000
SCF	.669	.044	.579	15.048	.000

 Table 4.28: Regression Analyses for Social Cultural Factors and Purchase

 Intention

a. Dependent Variable: Purchase Intention (PI)

b. Predictors: constant, Social Cultural Factors (SCF) n Source : *Survey data*, (2015)

# Table 4.29: Model summary

Model Summary										
Model	R	R Square	Adjusted	Ste	d. Error of the					
			R Square		Estimate					
	.579a	.336	.334		.32743					
a.	Predictors: (Co	onstant), SCF								
ANOVA										
	Su	m ofdf	Mean Square	F	Sig.					

		Sum Squares	ofdf	Mean Square	F	Sig.
	Regression	24.278	1	24.278	226.448	.000 <sup>b</sup>
	Residual	48.031	448	.107		
	Total	72.308	449			
-						

a. Dependent Variable: PI

b. Predictors: (Constant), SCF

# **4.11.1.2 Effect of social cultural factors on Attitude (H02)**

The second hypothesis (H<sub>02</sub>) stated that Social cultural factors had no significant effect on Attitude. Table 4.31 shows that the regression model was statistically significant ( $r^2 = 0.172$ , p< 0.05). This result shows that the explanatory power of SCF on the variability of the attitude towards counterfeit mobile phones in Kenya is moderate at 17.2 per cent ( $R^2 = 0.172$ ). Based on these results the researcher concluded that the model is good in in predicting Attitude. The Anova Test confirmed that the model significant P<0.05 and therefore could be used to check the coefficients.

Table 4.30:	Attitude Model summaries

		Γ	Mode	el Sum	mary			
Model		R	R Sq	uare	Adjusted R Sq	uare	Std.	Error
	•	415 <sup>a</sup>	.1′	72	.170		.37	658
Anova	test							
Model		Sum of Squa	res	df	Mean Squ	are F		Sig.
1	Regression	13.213		1	13.213	93.	.171	.000 <sup>b</sup>
	Residual	63.531		448	.142			
	Total	76.743		449				
a. Depe	endent Varial	ble: ATTITUD	E					
Predict	ors: (Constar	nt), SCF						
Course	2014	= )						

Source: *survey 2015*)

# **Regression Coefficients on relation of SCF and Attitude**

The standardized Beta value of 0.415 implies that there is a significant increase in consumer attitude for each unit increase in Social Cultural Factors (Table 4.32). These results revealed that the effect of Social cultural factor on Attitude was statistically significant ( $\beta = 0.415$ , P-value = 0.000 which is P<0). The results imply that SCF has a positive relationship with Attitude, hence, hypothesis H<sub>02</sub> is rejected since  $\beta \neq 0$  and P-value<0.05.

Model			dardized ficients	Standardized Coefficients	t	Sig.
		В	Std. Error	Beta		
1	(Constant)	1.621	.171		9.480	.000
	SCF	.493	.051	.415	9.653	.000

Table 4.31: Co efficient of Social Cultural Factors on Attitude

a. Dependent Variable: ATT

b. Source: (Survey data, 2015)

# 4.11.1.3 Effect of Attitude on Purchase Intention of counterfeits (H<sub>03</sub>)

The third Hypothesis (H<sub>03</sub>) stated that Consumer attitude has no significant effect on Purchase intention of counterfeits. The model was put to test to see how well it fits in the analysis. The results below ( $R^2$ =0.182) indicates that the model predicts 18.2% of the variation in Purchase intention. The Anova test confirmed that the overall regression model was significant since P=0.000 at F (1,449) =99 P<0.05,  $R^2$  =18.2%. The researcher interprets the effect of this data set as reflective that consumer attitudes have a correlation with purchase intention.

Model	R	R Square	Adjusted R S	quare	Std.	Error
1	.427ª	.182	.181		.36327	
a. Predic	ctors: (Constan	t), ATT				
ANOVA	<u>\</u>					
Model		Sum of S	Squares	Mean	F	Sig.
			df	Square		
1	Regression	13.1	.87 1	13.187	99.928	.000b
	Residual	59.1	21 448	.132		
	Total	72.3	i 449			
a. Deper	ndent Variable	: PI				
b. Predic	ctors: (Constar	nt), ATT				
Coeffic	ients					
		Unstand	lardized	Standardized	t	Sig.
		Coeff	icients	Coefficients		
		Beta	Std. Error	Beta		

# Table 4.32: Model summary Attitude on Purchase Intention

		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		Beta	Std. Error	Beta		
1	(Constant)	1.987	.136		14.569	.000
	ATT	.415	.041	.427	9.996	.000

a. Dependent Variable: Purchase Intention

b. Source (Survey data 2015)

# **Coefficient of attitude and Purchase intention**

The standardized beta value of 0.427 in the (table 4.33) above shows that for every unit rise in consumer attitude, purchase intention increases by up to 0.427 units. This suggests that there is a correlation between changing attitudes and a rise in people's willingness to acquire counterfeit items (=0.427, P<0.05).

A person's attitude is their "learned propensity to react favorably or unfavorably to a circumstance" (Huang et al., 2004). The findings demonstrate that attitude significantly influences purchase intention. Therefore, Hypothesis  $3(H_{03})$ , which claimed that there is no discernible impact of mobile phone attitudes on purchase intentions in Kenya, is disproved. In a related research (Muhammad, Anum, Husna, & Madiha 2014) discovered that attitudes regarding fake mobile phones had a

significant association with purchase intentions (Beta =.325, p =.001). The intention to acquire counterfeits has been shown to be negatively (positively) impacted by one's attitude about counterfeiting (Swami et al., 2009).

# **4.11.2 Testing the Hypothesis for Indirect Effects**

PROCESS Model 4 and 14 (a macro for mediation, moderation, and conditional process modeling for SPSS and SAS) was used to assess if the indirect path is mediated by attitude (H04) and whether this mediated link is dependent upon consumer knowledge (H<sub>05</sub>). This macro employs bootstrap confidence intervals to estimate the moderated mediation, in which the value of the moderator affects how indirectly the independent variable affects the dependent variable via the mediating variable.

This study used the integration approach suggested by Mueller et al. (2005) which includes three regression models: mediation, moderation, and moderated mediation. The three hypothesized models (Model I to Model III) were run as enumerated below:

# 4.11.2.1 Testing for the Mediating Effects of attitude in the relation of SCF and PI (Ho<sub>4</sub>)

The purpose for testing the hypothesized mediation is to address  $H_{04}$  which states that attitude has no significant mediating effect between consumer social cultural factors and purchase intention of counterfeits. The researcher followed and adopted the procedure proposed for mediation by Baron & Kenny (1986) as later harnessed by Hayes (2012) to test for the mediation effect of attitude on the relationship between social cultural factors and purchase intention of counterfeits as depicted in the model below, where path c depicts the direct effect of X on Y while path C' depicts the indirect effect of X on Y through the mediator (M).

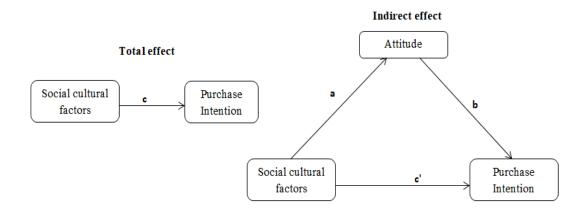


Figure 4.6: Mediation effect Model

# Model I:

The first condition for mediation to occur requires that the predictor variable (SCF) significantly predicts the outcome variable (Purchase Intention) Path c above. For this test we conducted multiple regression analysis using SPSS PROCESS Macro model 4(Hayes 2013), which enabled the researcher to test the total direct effect of Social Cultural factors on Purchase Intention, which was not controlled for the mediator attitude.

Bootstrap for Coefficients											
MODEL	β	Bias	Std.	Sig.	95% Confidence Interval						
			Error	(2-tailed)	Lower	Upper					
(Constant)	1.114	.008	.151	.001	.835	1.419					
SCF	.669	002	.046	.001	.575	.754					

a. Unless otherwise noted, bootstrap results are based on 1000 bootstrap samples **Source**: (*Survey data 2015*)

The testing is done based on the suggestion of (Shrout & Bolger, 2002) which is based on a bootstrap estimation approach with 5000 bootstraps and a decision rule based on upper and lower limit confidence level. This total effect is depicted as path c in figure 4.6 above which shows that social cultural factors have a significant effect on Purchase intention ( $\beta = 0.669$  [.579, .754], P<.000) which implies that with each unit increase in Social cultural factors, Purchase intention increases by 0.669. Since the model does not have zero in its summary then it shows that Social cultural factors are significant contributors to Purchase intention of counterfeits.

# Model II

The second condition for mediation to occur requires that the predictor variable (Social cultural factors) has a significant prediction effect on the mediator variable (attitude).

As seen in the findings below, table 4.35 (path "a") social cultural factors (SCF) have positive and significant effect on attitude towards counterfeits ( $\beta$ =0.4934 SE= .0511 [CI=.393, .594], P<.000). This implies that with each unit increase in Social cultural factors, attitude increases by 0.493 units. Further check on the significance of the models indicates that this model explains 17% of the variance in Purchase Intention (R<sup>2</sup> = 0.1772, p< 0.05) with significance confirmed by the Anova results that F (1,448) =93.17, P<.000. These results suggest that model II fulfills the second condition required for effect of mediation to occur in Hayes model 14.

# Model III: PATH b and c'

The third condition for mediation requires that the mediator variable (Attitude) significantly predicts the outcome variable (Purchase Intention) in the presence of the predictor variable (Social cultural factors)

The findings of model III are shown by Path b which shows that Attitude has positive and significant effect on purchase intention of counterfeits in the presence of the predictor ( $\beta$ =0.219 SE .0398 [CI=.1406,.2971], P<.000). This implies that with each increase in Attitude, Purchase intention increases by 0.219 units in the presence of social cultural factors. In a research Lutz (1991) explains that attitude works as a filter for an individual perception for an object. In addition, the direct effect of Social cultural factors on purchase intention (path c') in the presence of the mediator shows that SCF has a positive and significant effect on Purchase intention ( $\beta = 0.5609$  [.4679, .6539]), p<0.05 indicating that with each increase of SCF, Purchase Intention increases by 0.56 units. The resulting indirect effect of Social cultural factors on Purchase intention is a product of path a and b which gives a value of 0.11, a value that is confirmed by the results of the upper and lower limit confidence intervals [.1406, .2971] that have no zero value between them. This model shows the direct effect of the predictor variable on the outcome variable after controlling the indirect effect of the variation in Purchase Intention and it is significant F (2,447) =135, P<0.05). The results of model III imply that the third condition for mediation effect to occur has been fulfilled as well.

# **MODEL IV**

The fourth condition, which is the decision criteria, aims at establishing the nature of mediation in terms of partial or full mediation. The decision is affected by comparing Path C in model 1 and Path C' in model III. The findings show that Social Cultural factors (The independent variable) predicts Purchase Intention (The dependent variable) more strongly in model 1 than Model 111 which indicates that the mediator has a role in influencing the size and direction of the effects of the predictor on the outcome. The results give evidence for rejection of hypothesis H<sub>04</sub>. In line with Hayes 2012 model, the above findings imply that Attitude is a partial mediator on the relationship between SCF and PI since apart from the indirect effect, there is also direct effect of social cultural factors on Purchase Intention.

### Table 4. 34: Testing for Hypothesized mediation

OUTCOME VARIABLE: ATTITUDE

Model Summary Path a

R	R-sq.	MSE	F	df1	df2	р
.4149	.1722	.1418	93.1709	1.0000	448.0000	.0000
Model 1 (Path a)	Co eff	se	t	р	LLCI	ULCI
Constant	1.6211	.1710	9.4796	.0000	1.2850	1.9572
SCF	.4934	.0511	9.6525	.0000	.3930	.5939

### **OUTCOME VARIABLE: PI**

Model Summary (PATH b AND c')

R	R-sq.	MSE	F	df1	df2	р
.6147	.3778	.1006	135.7242	2.0000	447.00	.0000
Model II	Co eff	se	t	р	LLCI	ULCI
Constant	.7593	.1579	4.8102	.0000	.4491	1.0695
Path c'-SCF	.5609	.0473	11.8500	.0000	.4679	.6539
Path <b>b</b> -ATT	.2188	.0398	5.4979	.0000	.1406	.2971

Boot strap results for indirect effect
DIRECT AND INDIRECT EFFECTS OF X ON Y
$\mathbf{D}^{*}$

Direct effect of X (social cultural factors) on Y (Purchase intention)							
Effect	se	t	р	LLCI	ULCI		
.5609	.0473	11.8500	.0000	.4679	.6539		
Indirect effect(s)	) of X (SCF	) on Y (PI):					
Effect	BootS	E BootI	LCI Bo	ootULCI			
.1080	.027	.0	593	.1669			

Source: Survey data (2015)

The findings of the mediating effect of Attitude on the relation between social cultural

factors and purchase intention are summarized in the diagram below.

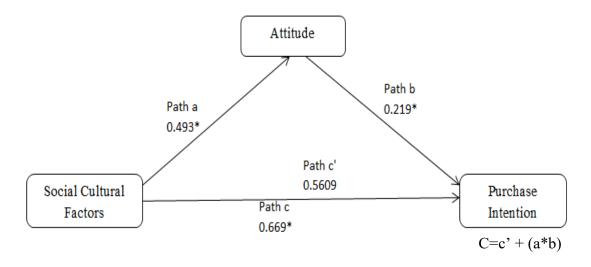


Figure 4.7: The mediation model with standard coefficient ( $\beta$ )

	Coeff	se	t	р	LLCI	ULCI
Constant	.7593	.1579	4.8102	.0000	.4491	1.0695
SCF	.5609	.0473	11.8500	.0000	.4679	.6539
ATT	.2188	.0398	5.4979	.0000	.1406	.2971

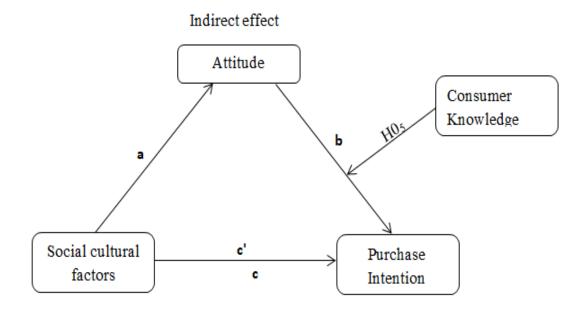
Table 4.35: Testing for hypothesized Mediation.

The mediation model shows that Y=0.7593+05609X+.2188M. This indicates that Attitude is a significant contributor in the relation between SCF and Purchase intention since for every unit increase in Purchase intention, Attitude contributes 0.2188 units. This means Attitude contributes up to 21.9% of the effect of SCF on PI. This is confirmed as statistically true and significant since the confidence intervals do not pass through zero since LLCI is 0.1406 and ULCI is 0.2971.

## 4.12.2.2 Testing for The Moderation Effects of Consumer Knowledge in the indirect Effect of SCF on PI through Attitude. (H05)

The main Purpose for conducting a test for hypothesized moderating effect was to address  $H_{05}$  which states that consumer knowledge has no significant moderating effect on the indirect relationship between social cultural factors (SCF) and purchase intention (PI) through attitude (ATT) as shown in the model below. Hayes (2017)

opines that the test for moderation would help to reveal the contingent effect of one variable (Attitude) on another (Purchase intention).



**Figure 4.8 Moderated Mediation** 

Table 4.37 below shows the output of PROCESS MACRO model 14 (Hayes 2017) and Model 1 with Attitude (the mediator) as independent variable (Path b), Purchase intention as outcome variable and consumer knowledge as moderator variable. Moderation is first tested using Hayes process model 1 which involves establishing the composite interaction effect of the moderator variable and the independent variable (the mediator for path b) on the dependent variable (Hayes 2013, 2017) which is key to show the conditional effects of the focal predictors at values of the moderator. The results show that model was significant and explains up to 65% of the variation ( $R^2 = 0.645$ , P < 0.05). These results reveal that there is a significant moderation effect of consumer knowledge on the relation between attitude and Purchase Intention ( $\beta$ =.1431 SE= .1989 [CI=.2478, .534] with P<0.005. This is affirmed by the fact that that the model was found to have a significant interaction of attitude and consumer knowledge ( $\beta$ =0.1354, SE=0.0591 CI=0.0193, 0.2514) which

confirmed that there is significant moderation of b path. Besides the test of highest order unconditional interaction(s) indicates that the interaction explains up to 4.2% additional variance on the independent variable as a result of the mediation process. This is based on a complementary analysis based on hierarchical regressions through which the researcher calculated a likelihood ratio test, comparing the fit of the model of Y that includes the interaction compared to a model that excludes it. The results showed significant change in R<sup>2</sup> once the interaction of all the variables happens ( $\Delta R^2$ =0.0042, [F=5.25 (1, 445), P <0.05] which confirmed there was a significant moderation in the model.

These results led to the rejection of the null hypothesis  $H_{05}$  which states that there is no significant moderation effect on the relation between Attitude and Purchase Intention of counterfeits.

R	$\mathbb{R}^2$ .	MSE	F	df1	df2	р
.8040	.6465	.0574	203.4541	4.0000	445.0000	.0000
Model						
	Co-eff	se	t	р	LLCI	ULCI
Constant	1.7813	.6905	2.5796	.0102	.4242	3.1385
SCF	.2430	.0397	6.1171	.0000	.1649	.3211
ATT	3740	.2050	-1.8243	.0688	7770	.0289
CKE	.1431	.1989	.7194	.0023	.2478	.5340
Interaction (ATT*CK	.1354	.0591	2.2928	.0223	.0193	.2514
Product terms key:						
Int_1 : ATT x	-	1. /				

<b>Table 4.36</b>	Testing	for	hypothesized	moderation effect

Model Summary

Test(s) of highest order unconditional interaction(s):

	R <sup>2</sup> -change	F		df1	df2	р
M*W	.0042	5.25	71	1.0000	445.0000	.0223
Foca	al predict: ATT	(M)	Mod	l variable: C	CK (W)	

Source: Survey data (2015)

Further check on the moderation table 4.37 reveals the nature and behavior of moderation. (Aiken & West 1991) suggests that it is important to probe the nature of the interactions at different levels of the moderator before concluding that there is conditional indirect effect of attitude on the relationship between social cultural factors and purchase intentions. This involves testing the data at three levels of the moderator, consumer knowledge (-1 Std dev., 0 Std Dev and 1 Std Dev)

The findings indicate that the conditional indirect effects were not found to be significant between social cultural factors and purchase intentions via attitude one standard deviation below the mean of consumer knowledge ( $\beta = .0231$ , SE = .0427, CI = .0608, .1070), but was found to be significant at the mean level ( $\beta = .08$ , SE = .0312, CI= .0185, .1413) and the higher levels of consumer knowledge with ( $\beta = .1366$ , SE = .0368, CI = .0643, .2090).

This certifies that the moderating effect of consumer knowledge on the relation between Attitude and purchase Intention increases as the levels of the moderator increase. This is consistent with the expectation as it confirms that as consumers become knowledgeable, their attitudes change as they become more capable of making informed decisions. Based on these findings null Hypothesis H<sub>05</sub> is rejected.

#### Table 4.37: Test for Moderated Mediation

#### OUTCOME VARIABLE: PI

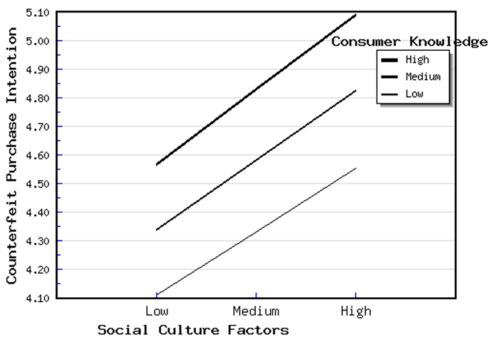
СК	Effect	se	t	р	LLCI	ULCI
2.9332	.0231	.0427	.5414	.5885	0608	.1070
3.3525	.0799	.0312	2.5572	.0109	.0185	.1413
3.7718	.1366	.0368	3.7119	.0002	.0643	.2090

Conditional effects of the focal predictor at values of the moderator(s):

Source: Survey data (2015)

Note: CI = 95% confidence interval for indirect effect: if CI does not include zero, the indirect effect is considered statistically significant.

To make it easier to interpret the results, it is always useful to plot the moderating effects (Aguinis & Gottfredson, 2010; Aiken & West, 1991; Dawson, 2014; Hayes, 2013b). Consequently graphic representations of the moderated mediation were produced using Hayes' approach (2013b). This involves tracing a simple straight line (y=ax+b) that correspond to a linear function which establishes a link between the indirect effect and the moderator. The level of the interaction between attitude and consumer knowledge were assessed at low, medium and high levels using the graphical method. The analysis as seen in the figure 4.9 below shows that the interactions of the independent variable (Attitude) and the moderator (consumer knowledge) has stronger significance on the outcome of the dependent variable (PI) at higher levels of the moderator variable(CK) than at moderate levels. The slopes in the figure thus indicate that at high levels of consumer knowledge, attitude was associated with less purchase intention.



moderation graph

**Figure 4. 9 Conditional Indirect Effects of SCF on Purchase Intentions at Values of the Moderator, CK via ATT Source:** *Survey data* (2015)

## 4.12.2.3 Testing for conditional indirect effect of the relationship between SCF and PI via ATT (Ho<sub>6</sub>)

The aim of conducting a test for hypothesized moderated mediation effect was to check  $H_{06}$  which stated that consumer knowledge has no significant moderated mediation effect on the relation between Social cultural factors and Purchase intention through attitude. According to Wang and Preacher (2015, "Moderated mediation occurs when the mediation effect differs across different values of a moderator such that the moderator variable affects the strength or direction of the mediation effect of *X* on *Y* via *M*". It refers to a situation where the moderating variable has a conditional impact (through the mediation variable) on the indirect effect of the independent variable on the dependent variable, Hayes (2013; 2015). The test for moderated mediation in the current study helps to revealed the contingent nature of the effect of the independent variable (SCF) on the dependent variable (Purchase Intention) through a mediator (Attitude) as conditioned by changes in the moderator (Consumer knowledge) Hayes (2007).

A number of scholars such as (Edwards and Lambert 2007; Hayes 2013; 2015; Preacher, Rucker, and Hayes 2007) support the idea that in order to create trustworthy and solid conclusions, simultaneous study of these many impacts is necessary. This is normally achieved through bootstrapping; a tested and qualified method used over time for determining the importance of indirect effects (Preacher et al. 2007). At each level of the moderator in the present study, the bootstrap resamples for moderated mediation were carried out using 5,000 resamples and a bias-corrected 95 percent confidence range (Hayes 2013). When the calculated confidence interval does not cross zero, indirect effects are considered significant (Hayes 2013; Hayes 2015; Montoya & Hayes 2015).

The procedure for testing moderated mediation involves running two regression models (Hayes 2017). The first regression model is meant to establish the existence of mediation in the presence of a moderator while a subsequent second model tests moderation and moderated mediation. These two models are shown in Table 4.39 which shows the output of application of PROCESS MACRO model 14 (Hayes 2013) applied with Social cultural factors as Independent variable, Purchase Intention as dependent variable attitude as Mediator and consumer knowledge as moderator .

#### **Moderated Mediation Model I**

The first moderated mediation model requires that there is a conditional indirect effect which demands that the predictor variable (Social cultural factors) significantly affects the outcome variable (Purchase Intention of counterfeits) through the mediator (attitude) in the presence of the moderator (consumer knowledge). Table 4.39 below presents the findings of model I and shows that Social cultural factors have positive and significant effect on Purchase intention ( $\beta = .243$ , SE = .0397, CI = .1649, .3211]), P<0.05) in the presence of both the mediator and the moderator, which implies that there is a significant conditioned effect of consumer knowledge on the relation between Social Cultural Factors and Purchase Intention through attitude. This finding leads to the conclusion that the first necessary requirement for performing a moderated mediation was fulfilled and as such the second regression model could be performed and interpreted.

#### **Model II Conditional Effect**

Having satisfied the first condition for moderation the second regression model was run to establish and confirm the effect of the moderated mediation effect of consumer knowledge (moderator) on the relationship between social cultural factors (Independent variable) and the Purchase Intention( Dependent variable) through Attitude ( the mediator).

Table 4.39 shows the conditional indirect effect of social cultural factors on Purchase Intention via Attitude as a function of different levels of consumer Knowledge which was calculated using bootstrap method of analysis measured at three levels of the consumer Knowledge (1SD above the mean, at the mean, and 1SD below the mean) at 95% Confidence Intervals. The results indicated that the mediating effect of attitude changed according to the level of the consumer Knowledge and was not significant ( $\beta$ = .0114, SE = .0221, CI = -.0336, .0539) at low levels of moderator (consumer knowledge), but at average levels of moderation the effect becomes significant ( $\beta$  = .0394, SE = .0170, CI = .0084 .0751) and remained significant at high levels of the moderator ( $\beta$  = 0.0674, SE = .0211, CI = .0307,.1137].

The overall moderated mediation is 0.0668 [.0128, .1361] and is a result of multiplying (0.4934\*0.1354) in the Table 4.39 below and illustrated as b<sub>3</sub> in figure 4.10. Since the confidence intervals associated with the findings above do not pass through zero, it is concluded that the mediation effect of Attitude on consumer social cultural factors and Purchase intention of counterfeits is significantly conditioned by consumer knowledge. Null Hypothesis 6 (H<sub>06</sub>) is therefore rejected. The overall model implies that a positive change in consumer knowledge by one unit indirectly and significantly strengthens the relationship between social cultural factors and purchase intention through attitude by 0.0668 units. These findings of the moderated mediation effect of Consumer knowledge on the relationship between social cultural factors and Purchase intention through attitude is presented in the Figure 4.10 below

#### Table 4.38 Outcome Model

DATA LIST FREE			
ATT	СК	PI .	
2.8494	2.9332	3.0755	
3.2628	2.9332	3.0851	
3.6763	2.9332	3.0946	
2.8494	3.3525	3.2973	
3.2628	3.3525	3.3303	
3.6763	3.3525	3.3633	
2.8494	3.7718	3.5190	
3.2628	3.7718	3.5755	
3.6763	3.7718	3.6320	

)ATA	LIST FREE	

#### Table 4. 39 Table for Indirect effect

#### ATT WITH ΡI BY CK DIRECT AND INDIRECT EFFECTS OF X ON Y Direct effect of X on Y

Effect	se	t	р	LLCI	ULCI	
.2430	.0397	6.1171	.0000	.1649	.3211	

#### Conditional process analysis of the indirect effects of X on Y:

#### **INDIRECT EFFECT:** SCF -> ATT -> PI

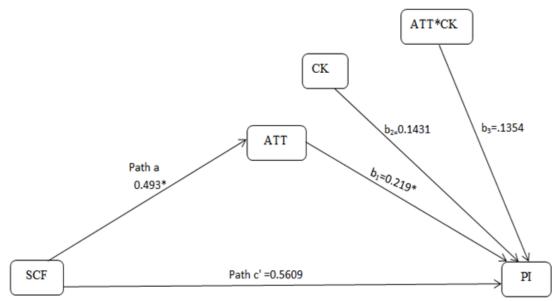
СК	Effect	BootSE	BootLLCI	BootULCI	
2.9332	.0114	.0221	0336	.0539	
3.3525	.0394	.0170	.0084	.0751	
3.7718	.0674	.0211	.0307	.1137	

#### Index of moderated mediation:

Index of moderated mediation:					
	Index	BootSE	BootLLCI	BootULCI	
CK	.0668	.0319	.0128	.1361	

Source: Survey data (2015)

The above findings of the moderated mediation effect of consumer knowledge on the relationship between social cultural factors and purchase intention through attitude is presented below



<b>Testing for</b>	hypothesized	moderated	mediation	$(\beta = a * b3) = 0.668$
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Figure 4.	10 Statistica	l graph for	<sup>•</sup> conditional	process
				<b>r</b>

<b>Table 4.40</b>	Definitions	of symbols
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SCF	Represents the independent variables Social Cultural factors
ATT	Represents the mediator variable Attitude
СК	Represents the moderator variable consumer knowledge
PI	Represents the dependent Variables Purchase Intention
ATT*CK	Represents a product of the interaction of the mediator variable
	(Attitude) and the moderator variable(Consumer Knowledge)
a <sub>1</sub>	Represents the effect of the independent variable on the mediator
<b>b</b> 1	Represents the effect of the mediator variable attitude on the
	Independent variable Purchase Intention
$b_2$	Represents the effect of the moderator variable consumer knowledge
	on the mediator Attitude
<b>b</b> <sub>3</sub>	Represents the effect of the interaction of the mediator variable
	Attitude and the moderator variable (Consumer attitude) on the
	dependent variable(Purchase Intention)
<b>c'</b> <sub>1</sub>	Represents the effect of the independent (Social Cultural factors) on
	the dependent variable (Purchase intention) in the presence of the
	mediator (ATT)
c <sub>1</sub>	Represents the direct effect of the Independent Variable on the
	dependent variable
$a_1 * b_3$	Denotes the conditional indirect effect of SCF on Purchase intention.

#### 4.13 Summary of Hypothesized Testing of Results

The table 4.41 below presents a summary of results of the tested hypothesis. It shows the beta values for the tested hypotheses and the corresponding significance values. The table provides the decision as to whether the researchers rejected or failed to reject the hypothesis based on the criteria set forth which is 95% confidence in which case the corresponding beta values should be less than or equal to 0.05 for the decision to fail to reject the results. Therefore results with less than 0.05 were rejected and if any would have a p more than 0.05, then the results would fail to be rejected.

Hypothesis	Beta value β	P-V CI	Test at 95% CL	Remark/ Decision
H <sub>01</sub> : Social cultural factors have no significant effect on the purchase intention of counterfeit mobile phones in Kenya.	0.579	P =0.000	P <0.05	H <sub>0</sub> rejected
H <sub>02:</sub> Social cultural factors are not significant determinants of attitude towards counterfeits in Kenya	0.415	P =0.000	P <0.05	H <sub>0</sub> rejected
$H_{03}$ : There is no significant effect of Attitude towards mobile phones on purchase intentions of the phones in Kenya	0.427	P =0.000	P <0.05	H <sub>0</sub> rejected
H <sub>04:</sub> Attitude has no significant mediation effect on the relation between social cultural factors and Purchase intention	0.1080		Whether CI straddles 0	H <sub>0</sub> rejected
H <sub>05</sub> : Consumer knowledge has no significant moderation effect on the relationship between attitude and Purchase Intentions of counterfeit products.	0.1354	LLCI ULCI 0.0193 0.251	CI	H <sub>0</sub> rejected
H <sub>06</sub> Consumer Knowledge has no significant moderated mediation effect on the relationship between social cultural factors and purchase intention through attitude	0.0668	LLCI ULCI 0.128 0.1361	Whether CI straddles 0	H <sub>0</sub> rejected

Table 4.41: Summary of Hypothesized testing Res	ults
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Source: Survey data: (2015)

#### **CHAPTER FIVE**

## SUMMARY OF FINDINGS, DISCUSSION, CONCLUSION AND RECOMMENDATIONS

#### **5.0 Introduction**

The chapter gives an overview of the study's key results as well as conclusions and suggestions based on those findings. Investigating Kenyan customer attitudes and willingness to knowingly buy counterfeit mobile phones was the study's main goal. It also summarizes suggested topics for more research and delivers the study's results. The chapter presents ideas for more study as well as a summary, conclusion, and recommendation of the research results based on the posited goals.

#### **5.1 Summary of Research Findings**

The continued thrust, distribution and purchase of counterfeit products continues to be a major challenge to legitimate business in the country, forcing marketers to increase studies in the said business and to develop ways to thwart such competition. Previous research results have identified social cultural factors and attitude as important factors that influence Purchase intention, the surrogate for purchase. Earlier Empirical research revealed that SCF has a positive significant relationship with customers purchase intention. Most of these studies focused on a direct relation between SCF and PI. The current study introduces a moderator variable in the study.

This study's main goal was to examine how consumer awareness affected the association between social and cultural factors (SCF) and purchase intentions (PI) of fake mobile phones in Kenya. Huang et al. (2004) noted that there is still a dearth of research from a demand viewpoint despite the fact that the grey market has expanded internationally. This research sought to close this gap by examining the conditional impact of consumer knowledge on the indirect relationship between social and

cultural characteristics and purchase intention through consumer attitudes. The study used three conceptual models from recent marketing studies: one that (Huang et al. 2004) proposed and tested, which considered price-consciousness, price-quality inference, and risk aversion as antecedents of consumer attitudes; another that (Ang et al. 2001) proposed, which considered social factors (i.e. Informative susceptibility and normative susceptibility) and personality factors (i.e., value consciousness, integrity, and personal gratification) as antecedents of attitudes and purchase intention.

Investigating the impact of social and cultural elements on Kenyan consumers' inclination to acquire counterfeit mobile phones was one of the study's particular goals. Specific objectives were to examine how social and cultural variables affect Kenyans' attitudes about fake mobile phones, To determine how customer attitudes about fake products affect consumers' intentions to buy similar phones in Kenya, To examine the role of attitude in mediating the relationship between social and cultural characteristics and the propensity to buy fake mobile phones in Kenya, To ascertain the moderate mediation effects of consumer knowledge on the mediated relationship between social cultural factors and purchase intentions in Kenya, as well as to check the moderate mediation effects of consumer knowledge on the relationship between consumer attitude toward counterfeits and the same.

The study borrows variables from previous studies and checked moderated mediation of consumer knowledge on the model. The study controlled for respondents age, gender and marital status and established the effect of the control variables on the dependent variable to be only 0.05 ( $r^2=0.05$ ) which indicates that 0.05 of variation in purchase intention was because of a combined effect of Age, Gender and marital status. Further analysis indicated that most of the 5% variation was because of Age ( $r^2=0.05$ ).

The study findings indicate that social cultural factors have a significant direct effect (H<sub>0</sub>1,  $\beta$  =.579, *p* =.000) on purchase intention of counterfeit mobile phones as well as Attitude towards mobile phones (H<sub>0</sub>2,  $\beta$  =.415, *p* =.000) whereas Attitude has significant direct effect on purchase intention (H<sub>0</sub>3,  $\beta$  =.427, *p* =.000).

The study further examined the meditating effect of attitude on the relationship between social cultural factors and purchase intention with results revealing that attitude mediates this relationship (H<sub>0</sub>4,  $\beta$  =.1080 SE =0.0276, CI= 0.0593, 0.167). Additionally the study sought to determine the moderating effect of consumer knowledge on the relationship between attitude and purchase intention of counterfeits and revealed that consumer knowledge moderates the relationship between attitude and purchase intention (H<sub>0</sub>5  $\beta$  =.1354 ,SE 0.1989, CI= .0.0193, 0.2514 ).

Finally the results of the conditional indirect effects of consumer knowledge on the indirect effect of social cultural factors on purchase intention via attitude (H<sub>0</sub>6) were also found to be significant ( $\beta$  =0.668 SE = .0319, CI = .128, 0.1361).

#### **5.1.1 Specific Objectives**

# 5.1.1.1 To investigate the effect of social cultural factors on Purchase Intention of counterfeit mobile phones in Kenya

The first objective of the study sought to determine the existence of a significant relationship between social cultural factors and purchase intention of counterfeits in Kenya. Social cultural factors were dimensionalised in four facets, Materialism, Subjective Norm, Value consciousness and Moral Intensity. The objective sought to establish the composite effects of the four dimensions on purchase intentions of counterfeits in Kenya. The findings revealed a statistically significant relationship between social cultural factors and purchase intentions. This implies that social cultural factors have a significant effect on Purchase Intention.

The study findings are in agreement with the reviewed empirical literature on social cultural factors and purchase intention of counterfeits. For instance (Inderjeet, Sethi & Chawla 2014) concluded that Social, Cultural and Marketing factors have a great influence on the buying behavior of Telecom in Chandigah India sub-continent.

The study results also agreed with the views of (Rimple, Srikant, Naseem, & Jitendra 2015) who found a positive relation between social cultural factors and purchase behavior ( $r^2=0.11$ ) in India. The findings are in similarity with those of Belk 1985 who found that social cultural factors (materialism) increase the inclination towards purchase of green product increases (Belk, 1985)

The results showed that Majority of the respondents agreed that there was a relationship between social cultural factors and purchase intention of counterfeit mobile phones. This seems to be consistent with the social fabric of Kenya in as far as families are concerned. Kenya has social families and the decisions one makes are sometimes vetted/approved by the society, subtly or openly. This implies that key decisions like purchasing could attract approval or punishment by the society, friends and relatives. This has managerial implications as it would affect consumer behavior as some consumers are likely to make decisions considering possible repercussions from the society.

### 5.1.1.2 To investigate the effect of Social Cultural Factors on consumer attitudes towards counterfeit mobile phones in Kenya

The second objective was aimed at establishing the relation between social cultural factors (IV) and attitude (M) among university students in Kenya. Attitude was

measured using an instrument borrowed from earlier studies by (Shi, 2011, Mathieson, 2001 & van der Heijden, 2003). The analysis of inferential statistics revealed a positive and significant relation between social cultural factors and attitude.

The results agree with those of (Hidayat, & Diwasasri, 2013) who studied Factors Influencing Attitudes and Intention to Purchase Counterfeit Luxury Brands among Indonesian Consumers and concluded that the attitude of consumers towards counterfeit products strengthens the purchasing intentions.

The findings agree with the Theory of Reasoned Action (Fishbein & Ajzen, 1980), which links product attitude and the intention to purchase and purchase behavior in total. According to this theory, consumers develop an attitude towards a product based on various prior experiences or even marketing campaigns, then the attitudes lead them to develop an intention to purchase a product or not and then the intention is finally transformed to actual purchase. The theory proposes that behavioral beliefs are the antecedents of attitude, and then attitude is manifested in a number of beliefs related to the behavior in question for example purchase intention (Fishbein & Ajzen 1975; Ajzen, 1991). The current study found that individual's social cultural factors have significant effect on actual purchase

# 5.1.1.3 To establish the effect of Consumer attitude on Purchase Intention of counterfeit mobile phones in Kenya.

The third specific objective sought to establish the effect of consumer attitude on purchase intention for fake mobile phones in Kenya. Attitude is "an enduring organization of motivational, emotional, perceptual and cognitive processes with respect to some aspect of our environment" (Hawkins, Catalano, Berglund, Ryan, & Lonczak, 2004). The study findings revealed a positive relation between attitude and purchase intention of counterfeits based on the fact that the null hypothesis was rejected. This implies that Attitude has significant influence on consumer purchase intention.

Purchase Intention, which is a surrogate for actual purchase was measured using the scale adopted from (Cheng, Fu & Tu, 2011). The scale was developed to determine if an individual believes that counterfeits have satisfactory quality, if an individual has a positive perception towards counterfeit goods, if an individual believes that counterfeit goods offer a better choice, if an individual believes that there is nothing wrong with purchasing counterfeit goods, if an individual believes that it would be desirable for an individual to purchase counterfeit goods, if an individual believes that counterfeits are practical, reliable, and convenient, and if an individual believes that purchasing counterfeits the company.

According to the results of the research, attitude has a beneficial and noticeable impact on the likelihood of making a purchase. These findings agree with those of Amy F. (2008), who studied the attitudes and beliefs of students at South Dakota State University and found a strong correlation between attitudes and purchase behavior of the students. These findings also agree with those of (Chaniotakis, Lymperopoulos, & Soureli, 2010) who found that consumers' purchase intention is influenced by their attitude, particularly during economic crisis, when people try to save money by purchasing private label product during economic downturn and purchase familiar products once economy improves Conroy (2010)

The findings of this study are consistent with those of a study conducted by (Hidayat, & Diwasasri, 2013), which came to the conclusion that a positive attitude of consumers towards counterfeit products strengthens the purchasing intentions. The

findings of this study are also consistent with those of a study conducted by Chaniotakis et al. (2010), who stated that a consumer's way of thinking influences both the consumer's intention to make a purchase and their perception of the current economic climate. The findings are also consistent with the idea of buyer intention, which asserts that a consumer's behavior, perception, and attitude are often connected to their desire to make a purchase (Chaniotakis, et al., 2010).

The findings also agree with the findings of (Jarvala, 1998), who came to the conclusion that people who have had a negative experience with a product and have a negative attitude toward the product would give a negative impact for future purchase, whereas the opposite is true when the quality matches the price, which shows a positive impact.

## 5.1.1.4 Mediating Effects of Consumer Attitude on the Relationship between Social Cultural Factors and Purchase Intention of counterfeit phones

The fourth Specific objective was to establish the indirect effects of consumer attitude on the relationship between social cultural factors and purchase intention of counterfeits in Kenya. The test was guided by the established causal approach for testing mediation. The mediator role of attitude in the relationship between these antecedents and behavioral intentions was introduced in a study by De Matos et al (2007). The current study results confirmed that Attitude towards counterfeits partially mediates the relationship between social cultural factors (SCF) and purchase intention of counterfeits in Kenya. This suggests that the impact that social cultural factors have on purchase intention is in some measure as a result of the attitude which is demonstrated in the specific buyer's behavior. The results indicated that whereas Social cultural factors could directly affect purchase intention, some part of it was through attitude (partial mediation). Control of attitudes therefore reduces the total effect of Social cultural factors on Purchase intention.

The results are in agreement with those of (Phau & Teah 2009) in which it was established that Attitude acts as a mediator between its own antecedents and outcomes in the case of counterfeits and they confirmed that attitude mediates the relation between social and personal factors and purchase intention.

The results also are in agreement with those of Butt (2014) who found that brand attitude mediates the relation between product involvement and purchase intention as well as those of De Matos et al. (2007) which confirmed that the intentions of consumers to buy counterfeit products are influenced by their attitudes toward counterfeits, which are influenced by factors such as perceived risk and social cultural factors such as subjective norm, personal gratification, integrity, price-quality inference which then reinforced the role of attitude as a mediator in the relationship between these antecedents and behavioral intentions.

The study adds more relevance to the theory of planned behavior (Ajzen & Fishbein, 1980) which recognizes that every consumer's decision is based on reasons which can be predicted by attitude, subjective norm, and perceived behavioral control. The results confirm that the intention of consumers to use a product depends on social cultural factors and that attitude is an accurate mediator in the relation between SCF and performing intention. This study reveals that consumers with particular attitudes have a tendency to behave in one way or another but the attitude itself is informed by social cultural factors.

## 5.1.1.5 Moderating effects of consumer knowledge on the relationship between consumer attitude towards counterfeits and the Purchase Intentions.

The fifth objective was to determine the conditional effect of levels of consumer knowledge on the relationship between consumer attitude towards counterfeits and the Purchase intentions of the same. Estimates for this variable were done using the scale of (Chen & Li 2007) and (Smith & Park's 1992). The elements were how knowledgeable one is about mobile phones, how one feels about their knowledge about phones , if one feels they can give people advice about different brands of phones , the level of information one needs to gather e to make a wise decision, how confidence one is about their ability to tell the difference in quality between different brands of phones compared to others and whether friends consider one to be an expert on mobile phones and can tell the difference between real and fake mobile phone. The results of the inferential statistics confirmed that consumer knowledge has a moderating effect on the relationship between attitude and purchase intention and that the size and direction of the mediation differed on different levels of consumer knowledge.

A survey conducted by (Satish & Peter, 2004) explains that knowledge about a product by the consumer plays an integral role during product purchase decisions. Other studies like (Rao & Monroe, 1988) argued that knowledge of the product is the main factor in product purchasing decision because if a customer has knowledge about a product, its features and benefits and how it is used, then it's likely this would increase the consumers' purchase intention hence demand.

The findings of the current study are in line with a study by (Chen, 2011) which showed that respondents would be less willing to take risk (less attitude) in buying expensive private label brand food products and therefore they take time to acquire as much knowledge as possible about the brands which indicates that the more product information and knowledge consumers have, the more likely that they would purchase a particular product and hence the conclusion that consumer knowledge has influence on attitude towards purchase intention since it reduces perceived purchase risk

These findings are in line with the study of Mhlophe (2015) on Antecedents of Consumer Purchase Intentions towards Organic Food Produces in South Africa which reveals the relevance of education, information and knowledge in shaping positive purchase intentions of consumers.

## 5.1.1.6 The moderated mediation effect of Consumer Knowledge on the relationship between social cultural factors and Purchase Intention through attitude

The sixth objective of the study was to establish the moderated mediation effect of consumer knowledge on the relationship between social cultural factors and purchase intention through attitude. The analysis was guided by the methods given for conducting moderated mediation (Hayes Process 14). This package is used to examine the effect of one or more mediating or moderating variables on the relationship between the independent and dependent variables. Process Macro provides various coefficients and test statistics that explain the indirect, direct, and total effects as well as total and partial effect sizes. The macro process established that consumer knowledge significantly affects the relationship between social cultural factors and purchase intention through attitude.

The findings are consistent with those of (Cowley & Mitchell 2003), who discovered that consumer or buyers with low knowledge learn only the brand information that is relevant to a usage context at encoding and do not organize brands in memory by

subcategory. As a result, the study found that consumers with less expertise tend to recall the same set of brands regardless of the usage situation at the time of retrieval. Higher-knowledge customers, on the other hand, learn brand information relevant for various usage scenarios and organize it by product subcategories. Higher knowledge consumers can recover the brands that are appropriate for the usage circumstances at the time of retrieval, and update the list of retrieved brands as the usage situation changes.

#### **5.2 Conclusion of the Study**

Counterfeiting has been a dominant theme of study over the years but the system and method of counterfeiting keeps changing making it an area for continuous study. Due to the nature of the business, Purchase intention is studied as a surrogate and indicator of actual purchase. Most studies in the menace are on the supply side, why traders and manufacturers still carry out the counterfeiting business even when it is prohibited by most governments. This is mainly because the nature of the subject matter would motivate traders more than consumers. This study sought to establish the demand side of counterfeiting and specifically the moderated mediation effect of social cultural factors on purchase intention where the attitude and consumer knowledge of the consumers is put to study as a mediator and moderator respectively. The results were obtained from an adequate population represented by a large sample which provided an appropriate statistical basis for making generalizations and drawing conclusions with respect to each of the specific objectives of this study.

The overall purpose was to establish if consumer knowledge had any conditioning effect on the indirect effect of social cultural factors on purchase intention through attitude, in the case of mobile phones in Kenya.

Customer purchase decisions are a key component in any business organization. This study investigated social cultural factors and attitudes on customer purchase decisions of counterfeit mobile phones among university students in Kenya.

On the basis of this study results, it was concluded that Social cultural factors have positive and significant direct effect on both customer attitude towards counterfeit goods as well as their intentions to purchase counterfeit mobile phones. Additionally Attitude has positive and significant influence on customer purchase decisions of mobile phone. The result of the study further revealed a complimentary mediation and concludes that attitude mediates the relationship between social cultural factors and Purchase intentions of counterfeit mobile phones. Furthermore the results indicate that consumer knowledge had a significant conditioning effect (moderation) on the indirect relation between social cultural factors and purchase intention through attitude by tinkering the link between attitude and Purchase Intention Finally, the findings confirmed that the respondents' knowledge about goods moderates the strength of the indirect relationship between social cultural factors and Purchase intentions for counterfeits via attitude in such a way that it is low when buyers knowledge is moderate and much stronger when the knowledge increases.

Based on the statistical analysis the following conclusions are made, drawn from the regression models where the coefficient of determination ( $R^2$ ) shows the direction and strength of the existing relationship between variables. There was enough evidence, based on  $R^2$  to justify the rejection of all the six 6 null hypotheses as depicted by the regression and correlation analysis results and hence make the conclusions below.

- 1. Social Cultural Factors have significant effects on purchase intention of Counterfeit mobile phones in Kenya ( $r^2 = 0.332$ , p<0.05)
- 2. Social Cultural Factors have a significant effect on attitude towards counterfeits (( $r^2 = 0.172$ , p< 0.05).
- 3. Consumer attitude towards counterfeit mobile phones in Kenya significantly impacts on purchase intention ( $r^2 = 0.210 \text{ p} < 0.05$ )
- Attitude mediates the between social cultural factors and Purchase intention (R<sup>2</sup>=0.1772 P<0.05)</li>
- 5. Consumer knowledge significantly and positively moderates on the relationship between consumer attitude and Purchase Intentions of counterfeit mobile phones in Kenya ( $r^2 = 0.645$ , p< 0.05).
- 6. There is a conditional effect of consumer knowledge on the relation between social cultural factors and Purchase intention of counterfeit mobile phones through attitude. [ $\Delta R^2$ =0.0042, [F, 5.25, 445, p<0.05].

These results are in congruence with the findings of (Chaudhry & Stumpf, 2009) & (Norum & Cuno, 2011) that there is an overall trend towards consumers viewing products of various categories as normal goods that are legitimately within the economy. The results are similar to (Husic & Cicic, 2009) findings that luxury consumption is influenced by brand image and quality which is consistent with Egol et al.'s (2010) notion that increased frugality is now becoming a learned behavior as well as those by (Fulk, 1993) who explained that social influence stimulates attitude.

Empirical studies confirmed the need to add a path from subjective norm to attitude in the planned Behavior model (Fischbein & Ajzen, 1975). This helped to increase the explanatory power of the model (e.g., Han & Kim, 2010; Ryu & Jang, 2006) and confirmed that social cultural factors (subjective norm) positively influences attitude in addition to the direct influence toward intention.

#### **5.3 Implications of the Study and Contribution**

#### 5.3.1 Managerial and policy Implications

From the study research findings, some strategic implications can be drawn to guide managers and policy makers in mobile phone business but also fast moving consumer goods industry in general. To managers and brand builders the results offer several suggestions to help in navigating the markets in current economic conditions and market realities. It offers knowledge and advice on the areas to target in messaging and branding. For instance it shows the need to be innovative in luxury goods and to scale down the versions of goods available in various markets since the study showed that non-deceptive counterfeits are bought by buyers who just want to make do with some fairly good product. This would encourage some to buy cheaper counterfeits if they cannot afford the original item. Innovation and production of lower versions of the new products would give such consumers options so that they don't result in counterfeits. Innovation would also make production of the new product cheaper especially if targeted for the mass market and this ensures it is still within the reach of the majority. Further from the research findings, it's suggested that companies should invest in understanding different consumer motivations, which would enable them to offer differentiated marketing efforts to different segments and engage shoppers on items and ideas that motivate them towards purchase. This is consistent with what was found by Carty (2009) who stresses the need for innovations in luxury products, as status consumers may be more tempted to buy the newest products in the market. This is recommended even in the phone industry as it would enable the company to tailor make different versions of the product for different categories of people since this would discourage counterfeit consumption to some extent as all members of the society would get an offering that offers them both status and value without doing illegal purchase of counterfeit goods.

The literature also stresses the need for managers and brand owners to invest in consumer education especially in giving knowledge to the consumers about the need to temperate style, quality, and practical luxury rather than simply conspicuous consumption of status products which has been known to make consumers feel the need to rationalize their purchases. The study also agrees with the observations of (Phau & Cheong 2009) that marketers of especially luxury products should consider the use of nested brands and sub brands to reach young, status brand loyal consumers who may not be able to afford the parent status brand. This is because the study found a relationship between intention to purchase and levels of value consciousness, suggesting that consumers are willing to purchase good brands and products, but they are equally looking for value for money.

Brand and product managers should note that in promoting status products they should be aware of the impact significant others, friends and relatives have on the final consumers. As they make their communication message to the trade, marketing communication managers should be aware that other people, especially friends and relatives approve of these purchases; and that buyers make comparisons with others to gauge the success of the product in increasing the owner's status (Heaney, Goldsmith, & Jusoh, 2005).

The findings of this thesis contributes information for policy makers and managers of brands about the main predictors of consumer's attitudes toward counterfeits and advises for the use of adverts with perceived risk low value and utility as one of the messages to be used in discouraging purchase and consumption of counterfeits.

Companies should also note that targeting the consumer heart (morality) rather than the head (value) has more chance in converting undecided buyers. As observed by (Heaney et al 2005) since materialism is a concept that is distinct from status consumption, presentation to status seekers should avoid purely materialistic appeals because whereas consumers may want such items, they may consider them as giving status rather than material possessions utility.

Since the results have shown there is a correlation between social cultural factors like Materialism and approach towards Purchase intention, Marketers in luxury/status products, including mobile phones are advised to make brand extensions and variations that can fit and satisfy the ego demands of various segments.

Anti-counterfeiting authorities might use the findings of this study to help them strategize their anti-counterfeiting campaigns. Governments and policymakers should also target consumers who are influenced by their peers when it comes to information so that the opinion leaders can be used to shape demand. The study findings underline the significance of carefully personalizing communication regarding the downsides of counterfeit products to consumers, rather than focusing solely on manufacturers and suppliers.

Since the study found that social cultural factors have significant effect in influencing consumer behaviors, marketing managers are advised to look for ways and methods to incorporating social cultural variables like materialism and value consciousness in their marketing strategies especially in differentiation. The companies should also make their strategic communication in such a way that it provides education on the positive benefits of buying genuine and authentic product versus buying cheap counterfeits.

#### **5.3.2** Theoretical implications

This study brings several theoretical contributions to the consumer purchase behavior literature and unearthed several unanticipated concerns which have ramifications for the whole body of knowledge. According to the findings of the study, there is a significant issue with the operationalization of the notion of counterfeiting even among those who work in the sector. Industry participants and even certain government organizations do not have a clear knowledge of the differences between counterfeiting, grey imports, parallel imports, and even stolen items. Because of this, any efforts to reduce the effects of counterfeiting would be less effective due to this skewed operationalization.

Second, the research provided a significant addition to the expansion of academic knowledge on intellectual property rights by examining them in the context of a sub-Saharan African environment, with a special focus on mobile phones in Kenya. The existing body of literature laments the lack of scholarly input on intellectual property and particularly on the consumption of counterfeits in sub-Saharan Africa, despite the economic harm caused by the vice. As a result of the study, there has been an increase in the amount of academic research conducted on the purchase intention and consumption of counterfeits in Africa. To be more specific, this research makes a contribution to the current body of literature by adding a new variable to an existing model, namely consumer knowledge as a moderator in the model of attitude and purchase intention that was previously used.

This study will be of use to intellectuals, and it will serve as a reference for studies and projects to be undertaken in the future by practitioners on intellectual property rights and consumer behavior. The results of this research contributes to the growing body of theoretical writing on the factors that influence consumers' attitudes about and intentions to buy counterfeit goods.

The results of the study make a contribution to the current body of research by expanding and examining the major antecedents of consumer attitudes toward counterfeit goods in general and mobile phones specifically. It determines the relative significance of each antecedent in terms of its ability to predict attitudes and behavioral intentions in Africa. Besides that, this study introduces the a new model of consumer knowledge as a moderator in the existing model of direct and indirect relationship among variables

#### **5.4 Recommendations**

Recent data and public pronouncements have shown that counterfeits pose the biggest challenge to some of the emerging economies such that mitigation against counterfeiting is inevitable both in the private and public sector. From the findings of this study several recommendations are made as below to stakeholders including the government and the policy makers. First anti-counterfeiting agencies may consider an amendment of their strategies in fighting counterfeits from forceful change to seek ways to influence the attitude of the citizens. This is because evidence from the study has shown that attitude is a big contributor to the consumption of counterfeits in Kenya. Companies and authorities should also drive the idea that genuine products give better value in the long run and advice consumers that cheap imitations are more expensive and offer less value for money in the long run. Secondly The Governments and NGOs (Non-Governmental Organizations) are encouraged to address specific

social cultural factors like materialism, subjective norm, value consciousness and morality that were found to be major influencers towards counterfeits.

Finally since it was established that consumer knowledge is key in influencing the consumer attitude towards purchase intention of mobile counterfeits in that it moderates positively the relationship between consumer attitudes and purchase intention, it should be considered as key in the mobile phone industry and therefore marketing managers should work hard to give correct knowledge to potential consumers so that they can make correct decisions. Adverts and commercials should aim at enlightening consumers and buyers about the positive side of buying genuine goods and at the same time educating them on the risk, both health and legal of purchasing and consuming fake products.

#### 5.5 Limitations and Recommendations for Further research

This study contributed and enriched the body of knowledge on the matter of purchase intention of counterfeits as well as contributors to consumer decision processes. Nevertheless, it has opened up more gaps for to be filled in future studies so as to enlarge knowledge in this area further.

First off, the conceptual framework did not cover all social, cultural, and psychological variables as well as attitudes about buying counterfeit goods. Other factors may also provide further perspectives on the variables that influence Kenyans' propensity and attitude toward the purchasing of counterfeit goods. It was also clear that the variables used to operationalize social cultural factors—namely materialism, subjective norm, value consciousness, moral intensity, attitude, and desire to buy counterfeit goods—were not all-inclusive. Future researchers may be encouraged to develop additional pertinent measures of these variables and to further reorganize the conceptual framework in order to present the interrelationships between those variables in a different way and potentially reveal additional insights on the topic of purchase intention of counterfeits. Moreover the suggested model may not be entirely mediated by attitude, and the indirect relationship between social and cultural variables and purchase intention via attitude may not be entirely moderated by consumer knowledge. New mediators and moderators could be found in future studies. Factor analysis's identification of the key underlying issues driving the study variables may serve as an excellent springboard for this extra investigation. The robustness of the research models and, therefore, the validity of the results, might be increased by including additional variables and using a more comprehensive set of statistical methods than those used in this work.

Second, it was theorized that Social Cultural Factors were the antecedents of attitude and that attitude is only a mediator in the relationship between SCF and Purchase Intention. Future research might look at the direct impact of attitude on the dependent variable without taking social and cultural context into account. Such study would provide a better knowledge of the factors that influence counterfeits' buying intentions.

Thirdly, the study's focus on a particular industry the mobile phone industry in the Republic of Kenya only could have hampered the study's capacity to generalize its findings, especially considering that mobile telephony in Africa hasn't yet achieved complete social integration. Therefore, care should be exercised when extrapolating these results to other industries. It should be remembered that results from one area may not apply to the other sectors equally. This makes it necessary to repeat the research in various industries.

Fourth, it is suggested that the research be replicated in other settings since the applicability of the study findings in other cultural contexts, even within Africa, may be difficult owing to the dynamic character of the key factors employed in this study.

Fifth, the research focused mostly on college students. To determine if the effects of the determinants are the same throughout the economy's cohorts, a comparable research must be conducted in other age groups. For instance, a more thorough investigation is required to determine if working individuals, top managers, and government personnel may report comparable findings.

Finally study was done in the Nairobi County targeting university students in public universities Due to the limited geographical scope and target population, the study should be replicated in other areas or Countries with a wide scope and large target population as this may present different results

Despite the study's limitations, the findings were valuable for managerial and theoretical concerns. The findings might therefore serve as a springboard for further investigation on consumer attitudes and behavior toward counterfeit goods.

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### **APPENDICES**

## **Appendix 1: Questionnaire**

The moderated mediated effects of consumer knowledge on the relationship between social cultural factors and purchase intention of counterfeits through attitude.

Thank you for taking the time to complete this questionnaire. All the responses will be anonymous and only used for the purpose of our thesis. Please read all the questions carefully and answer to the best of your knowledge. This questionnaire is about counterfeit mobile phones. It will not take more than 15 minutes to fill these questions.

## **Section 1: Demographics**

Please fill in the box that classifies you best.

## 2. Gender

 $\Box$ Female  $\Box$  Male

### 3. Your age:

□18-24

25-34

□35-44

□ 45-54

### 4. Status:

□Single

□Married

### 5. Income status.

# $\Box$ Employed $\Box$ Not Employed

2-Please indicate the extent to which you agree or disagree with the following statements about attitude and intention towards counterfeits. Use the scale below as the guide

1=Strongly disagree 2= Disagree, 3=Neutral	4=Ag	ree 5=8	Strong	ly agre	e
ATTITUDE TOWARDS COUNTERFEITS	1	2	3	4	4
Counterfeits have satisfying quality.					
I have a positive perception towards counterfeit					
goods					
When shopping counterfeit goods is a better choice					
There's nothing wrong with purchasing counterfeit					
goods					
It would be desirable for me to buy counterfeit					
goods					
Counterfeits are practical.					
Counterfeits are reliable.					
For me to buy/use counterfeits are convenient.					
Buying counterfeits benefits the consumer					
For me to buy/use counterfeits is proud.					
For me to buy/use counterfeits is guiltless.					
PURCHASE INTENTIONS-	1	2	3	4	5
What is the chance that you will:					
Think about a counterfeited product as a choice					
when buying something					
Buy a counterfeited product					
Recommend to friends and relatives that they buy a					
counterfeit product					
Recommend to friends and relatives that they buy a					
counterfeited phone					
Say favorable things about counterfeit phones.					
SUBJECTIVE NORMS- How important is the		2	3	4	5
below person's approval for your purchase of new					
items					
Peers/colleagues					
Important friends					
Parents					
Siblings					
My relatives and friends approve my decision to					
buy counterfeited products					
MATERIALISM-	1	2	3	4	5
Some of the most important achievements in life					
include acquiring material possessions					
I don't place much emphasis on the amount of					
Material objects people own as sign of success					

The things I own say a lot about how well I'm doing					
I like to own things that impress people.					
I don't pay much attention to the other peoples					
possession					
Materialism-Centrality					
I usually buy only the things I need.					
I try to keep my life simple, as far as possessions					
are concerned					
The things I own aren't all that important to me.					
I enjoy spending money on things that aren't					
practical.					
Buying things gives me a lot of pleasure.					
I like a lot of luxury in my life.					
I put less emphasis on material things than most					
people					
MATERIALISM-Happiness				-	-
I have all the things I really need to enjoy life.					
My life would be better if I owned certain things					
I'd be happier if I could afford to buy more things.					
It sometimes bothers me quite a bit that I can't					
afford to buy all the things I'd like					
MORAL INTENSITY-					
I consider honesty as an important quality for one's					
character					
I consider very important that people be polite					
I admire responsible people					
I like people that have self-control					
VALUE CONSCIOUSNESS -	1	2	3	4	5
The higher the price of the product the higher the					
The higher the price of the product, the higher the					
product quality					
When purchasing a product, I always try to maximize the quality I get for the money I spend					
I always check prices at the grocery store to be sure I get the best value for the money I spend					
The price of a product is a good indicator of its					
quality					
You always have to pay a bit more for the best					
I would buy counterfeit mobile phone because the					
prices of mobile sets are unfair and over-priced.					
I would consider buying counterfeits mobile phone					
if the price of the original is beyond my reach					
Overall counterfeit phone is worth the price as			1		
compared to original					
I am very concerned about low prices, but I am			1		
equally concerned about product quality					
I shop around for lower prices on products, but they					
still must meet certain requirements before I buy					
-					
them					

Price premium of authentic phones compared to non-authentic is not justified			
CONSUMER KNOWLEDGE How knowledgeable			
are you about mobile phones			
I feel very knowledgeable about			
phones			
1			
I can give advice about different brands of			
phones			
I only need to gather very little information to make			
a wise decision			
I feel very confident about my ability to tell the			
difference in quality between different brands of			
phones.			
Compared to an average person, I know a lot about			
mobile phones			
My friends consider me as an expert on mobile			
phones			
I can easily tell the difference between a counterfeit			
phone and a real one			
I can tell the value I can get from a counterfeit			
phone as compared to a real one			

# **Appendix 2: Table for Calculating Sample Size**

The Table is constructed using the following formula for determining sample size:

Formula for determining sample size  $s = X^2 NP(1 - P) + d^2 (N - 1) + X^2 P(1 - P)$  s = required sample size.  $X^2 =$  the table value of chi-square for 1 degree of freedom at the desired confidence level (3.841). N = the population size. P = the population proportion (assumed to be .50 since this would provide the maximum sample size).

d = the degree of accuracy expressed as a proportion (.05).

Source: Krejcie & Morgan, 1970

	PI1	PI2	PI3	PI4	PI5
PI1	1.000	.572	.430	.390	.397
PI2	.572	1.000	.550	.531	.469
PI3	.430	.550	1.000	.813	.691
PI4	.390	.531	.813	1.000	.775
PI5	.397	.469	.691	.775	1.000

# **Appendix 3-Inter- Item Correlation Matrix for Purchase Intentions**

# **Component Matrix**<sup>a</sup>

**Inter-Item Correlation Matrix** 

Component	
1	
.655	
.758	
.880	
.889	
.841	
	1 .655 .758 .880 .889

Extraction Method: Principal Component Analysis.

Inter correlation for Consumer Knowledge items-										
Item Correlation Matrix										
_	CK1 CK2 CK3 CK4 CK5 CK6 CK7 CK8									
CK1	1.000	.693	.273	.511	.548	.496	.495	.347		
CK2	.693	1.000	.348	.642	.629	.651	.529	.456		
CK3	.273	.348	1.000	.375	.317	.316	.331	.251		
CK4	.511	.642	.375	1.000	.626	.599	.593	.515		
CK5	.548	.629	.317	.626	1.000	.672	.599	.530		
CK6	.496	.651	.316	.599	.672	1.000	.570	.473		
CK7	.495	.529	.331	.593	.599	.570	1.000	.640		
CK8	.347	.456	.251	.515	.530	.473	.640	1.000		

# Appendix 4-Inter- Item Correlation Matrix for Consumer Knowledge

	Consumer knowledge -Component Matrix <sup>a</sup>							
	Component							
	1							
CK1	.730							
CK2	.832							
CK3								
CK4	.815							
CK5	.830							
CK6	.805							
CK7	.795							
CK8	.699							

Extraction Method: PCA.

a. 1 components extracted.

Component Matrix	
-	Component
	1
AT1	.663
AT2	.687
AT3	.760
AT4	.765
AT5	.791
AT6	.594
AT7	.737
AT8	.787
AT9	.770
AT10	.750
AT11	.514
Extraction Method: Principal Com	ponent Analysis.
a. 1 components extracted.	

# Appendix 5: Principle Component Analysis - Attitude

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	Init	ial Eigenvalu	es E	Extraction Sums of Squared Lo				
	Total % o	of Variance C	umulative %	Total	% of Variance	Cumulative %		
1	3.276	65.520	65.520	3.276	65.520	65.520		
2	.838	16.762	82.281					
3	.420	8.403	90.685					
4	.300	6.008	96.693					
5	.165	3.307	100.000					

Appendix 6: Principle	<b>Component Analysis - Purchase Intention</b>
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			Rotat	ed Comp	onent Ma	<b>t</b> rix <sup>a</sup>		
				Comp	onent			
	1	2	3	4	5	6	7	8
SN1		.791						
SN2		.863						
SN3		.871						
SN4		.894						
SN5								
MAT1								
MAT2								.763
MAT3					.616			
MAT4					.708			
MAT5								.729
MAT6							.762	
MAT7							.625	
MAT8						.629		
MAT9								
MAT10					.615			
MAT11					.660			
MAT12								
MAT13						.587		
MAT14				.777				
MAT15				.751				
MAT16				.834				
MO1	.839							
MO2	.800							
MO3	.876							
MO4	.813							
VC1			.725					
VC2			.594					
VC3			.599					
VC4			.725					
VC5			.705					
VC9			.537					
VC10								

**Appendix 7: Rotated Component Matrix for Social Cultural Factors** 

Ν	S	N	S	N	S	N	S	N	S
10	10	100	80	280	162	800	260	2800	338
15	14	110	86	290	165	850	265	3000	341
20	19	120	92	300	169	900	269	3500	246
25	24	130	97	320	175	950	274	4000	351
30	28	140	103	340	181	1000	278	4500	351
35	32	150	108	360	186	1100	285	5000	357
40	36	160	113	380	181	1200	291	6000	361
45	40	180	118	400	196	1300	297	7000	364
50	44	190	123	420	201	1400	302	8000	367
55	48	200	127	440	205	1500	306	9000	368
60	52	210	132	460	210	1600	310	10000	373
65	56	220	136	480	214	1700	313	15000	375
70	59	230	140	500	217	1800	317	20000	377
75	63	240	144	550	225	1900	320	30000	379
80	66	250	148	600	234	2000	322	40000	380
85	70	260	152	650	242	2200	327	50000	381
90	73	270	155	700	248	2400	331	75000	382
95	76	270	159	750	256	2600	335	100000	384

Appendix 8: Krejcie & Morgan 1970 Table For Sample Size Calculation

Note:	"N" is population :	size
-------	---------------------	------

"S" is sample size.

Source: Krejcie & Morgan, 1970

# **Appendix 9: University Enrollment**

#### STUDENT ENROLMENT IN PUBLIC UNIVERSITIES 2007/08 - 2012/2013

						Number
Fields	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13*
Undergraduates	85,351	89,404	108,528	134,395	141,764	170,417
Postgraduates.	6,789	6,920	7,054	8,735	16,153	24,417
Other, i.e. Diploma, etc.	4,967	4,324	7,118	7,796	5,904	6,856
Total	97,107	100,648	122,700	150,926	163,821	201,690

\*\*Enrolment includes regular and parallel degree programmes in the 7 public universities

\* Provisional

Kenya National Bureau of Statistics is ISO 9001:2008 Certified

#### - 6 -

#### PRIVATE UNIVERSITIES Student enrolment, 2007/08 - 2012/2013

						Number
Private Accredited	2007/08	2008/09	2009/10	2010/11	2011/12	2012/13*
Daystar University	3,906	4,103	3,793	5,915	4,049	5,431
Baraton University	2,712	2,849	2,019	3,149	2,155	2,344
Catholic University	3,255	3,420	2,019	3,149	2,155	3,647
U.S.I.U.	3,407	3,579	4,590	7,158	4,899	5,206
Soott Theological College	245	257	131	204	140	255
Agha Khan University	567	596	179	279	191	503
Strathmore University	1,818	1,910	2,341	3,651	2,499	5,811
Kabarak University	786	826	1,126	1,756	1,202	1,215
Nazarene University	1,469	1,543	1,285	2,004	1,372	1,932
Methodist University	2,198	2,309	2,426	3,783	2,589	11,208
Kirin Women University of Sc.Tech	768	806	180	281	192	124
TOTAL	21,132	22,198	20,089	31,327	21,443	37,672

\* Provisional

Source: Statistical Abstract 2018

# **Appendix 10: Pilot Reliability Test**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
.826	820	32

## **Reliability Social Cultural Factors**

# **Reliability Statistics For Attitude Towards Counterfeits**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
.828	.849	11

# **Reliability Statistics for Purchase Intention**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
.825	.835	5

## **Reliability Statistics for Consumer Knowledge**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	No of Items
.811	.812	8

#### **Appendix 11: Letter of Authority to Collect Data**



Tel: 0790940508 0771336914 0736138770 Fax No: (053) 43047 Telex No. MOIVARSITY 35047 P.O. Box 3900 Eldoret. Kenya

.

RE: MU/SBE/PGR/ACD/21B

DATE: 15th April, 2015

#### TO WHOM IT MAY CONCERN:

Dear Sir/Madam,

#### RE: BERNARD MULANDI MULA - SBE/D/112/12

The above named is a bonafide student of Moi University, School of Business & Economics, undertaking **D.Phil. in Business Management** degree; specializing in **Marketing**.

He has successfully completed coursework, defended his proposal, and is proceeding to the field to collect data for his research titled: "Consumer Social Cultural Factors, Attitude, Knowledge and Purchase Intention of Counterfeits"

Any assistance accorded to him will be highly appreciated.

Yours faithfully,



DR. RONALD BONUKE ASSOCIATE DEAN AND CHAIR-POSTGRADUATE SPTUDIES

/MS

(ISO 9001:2015 Certified Institution)