# INFLUENCE OF MOBILE PHONE USAGE ON SPOUSE RELATIONSHIP A CASE OF TUUNGANE TUJIJENGE SACCO EMBU COUNTY, KENYA.

 $\mathbf{BY}$ 

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A Research Project Report is Submitted in Partial Fulfillment of the Requirements for the Award of a Degree of Master of Arts in Project Planning and Management of the University of Nairobi

# **DECLARATION**

This research project report is my original wo	ork and has not been submitted for a degree or
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## **DEDICATION**

This research project report is dedicated to my family; my wife Anisia Wandiri, my young daughter Abigail Wanjiru and my mother Josphine Wanjiru for your love, support and encouragement during this study.

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## ABBREVIATIONS AND ACRONYMS

**BPO** Business Process Off-shoring

**GDP** Gross Domestic Product.

ICT Information and Communication Technology

IT Information Technology

**PIN** Personal Identification Number

**SACCO** Saving and Credit Cooperative.

SMS Short Message Service

TTS Tuungane Tujijenge Sacco

#### ABSTRACT

The Economic Pillar of Vision 2030 seeks to improve the prosperity of all regions of the country and all Kenyans by achieving a 10% Gross Domestic Product (GDP) growth rate by 2012. Promote Kenya as a Business Process Off-shoring (BPO) or IT enabled services (previously known as business process off-shoring) destination to increase demand of BPO services from Kenya globally. This pillar that leads to Increased ICT talent pool to meet the increasing demand and provide a set of BPO specific incentives to attract investments cannot be overemphasized. It comes with adoption of the mobile phone by families that have been a global phenomenon in recent years. It is now an integral part of family members' daily lives and is for the majority, the most popular form of e-communication. In fact, the mobile phone has turned from a technological tool to a social tool. This paper explored the influence of mobile phone on spouse relationship. Families use the mobile phone in positive ways to organise and maintain their social networks. However, there are also negative influences on spouse relationship. Similarly, the mobile phone has lead to changed dynamics in the family, with issues of safety and surveillance from a parental and spouse perspective leading to negotiated changing freedoms for family members. While functional coordination can be beneficial for the family, other problems can arise such as financial difficulties, non-custodial parent access, as well as over reliance on the mobile phone for safety issues and intrusion into family lives. The influence of the mobile phone on the spouse as an institution has not however, received as much research. Disruptions to spouse activities or events, incidences of cheating and bullying are some of the negative impacts. While promoting social network and improving communication for distant spouse members seems to be the only positive for the family, further research is needed into the influences of mobile phone use on spouses. This study used descriptive research design targeting particularly the staff, directors and members of Tuungane Tujijenge Sacco Society Ltd in Embu and the influence of mobile phones in their spouse relationship. It sought to meet the following objectives; to establish how communication through mobile phone influence spouse relationships, to determine the extent to which mobile phone money transactions influence spouse relationship, and the extent to which use of applications on mobile phones influence spouse relationship, a case of Tuungane Tujijenge Sacco Embu County, Kenya. The study findings showed that: 65% of the respondents agreed that communication through mobile phones has enhanced the relationship and families have become better but sometimes led to break up and bad relationships; 42.4% of the respondents believed that mobile phone money transactions have led to positive relationships, improved livelihoods and financial savings of the group members; and 37.6% of the respondents agreed that mobile phones applications use like photo galleries accessed on spouse mobile phone has demonstrated promiscuity and a concern of insecurity while addiction to social media has affected spouse commitment to spouse relationship negatively. The results will be used for more research and also to contribute to improving family as a basic unit of the society.

#### CHAPTER ONE

#### INTRODUCTION

## 1.1 Background to the Study

Information and communication Technology have revolutionalized every sphere of human society especially the advent of mobile phone which has brought an information and communication revolution worldwide. The world now has become a global village where distances among nations become meaningless. People living thousands of miles away can communicate or even transact with each other instantly. In Pakistan for instance the findings of study show that the new generation there used the mobile phones for interpersonal communication. However, young generation spent more time on average using mobile phones and somewhat agreed that mobile phones reduced face-to-face interaction. Direct interaction is equally important to bring families close to each other, resolve disputes and develop a healthy society. Mobile phones can be used as a tool to strengthen these family relations. In this way a more cohesive society can be developed in this technology boom.

Barely a decade ago, few policy analysts, if any, predicted that Africa will be the continent to beat in the uptake of mobile communications. A quiet revolution took place until early 2000 that many began to notice the fast growth of the mobile technology. The demand for mobile phones in Africa in the last few years has been more than most people expected and continues to expand. Operators have traditionally target urban areas, but it is the demand from rural and low income areas that have exceeded all expectations. The use of phones has already become part of African culture. As urban markets become saturated, the next generation of phone users will be rural based, and they have commenced to flood with all sorts of new types of smart phones.

The arrival of the cell phone in rural areas has taken Kenya by storm. It has turned out to be such an amazing transition happening since most people in the start, did not reckon its capacity to gradually become a lifestyle choice. It has certainly changed the way people communicate and becoming a natural necessity for people of Kenya. This can be seen from the numbers of cell phone units sold in the past years. The cell phones in Kenya have gone from 1 million in 2002 to 6.5 million in 2006. Some of this boost has found their way into the rural areas of Kenya and that is what this thesis focuses on. It is not long ago that cell phone was an unfamiliar item for the many inhabitants in rural Kenya.

In less than a decade this has changed completely due to the cell phone arrival. In the beginning the cell phone was considered as a luxury item but that has changed and now more people than ever own a cell phone. The cell phone has become very important for all people and it has turned to be a necessity especially in the rural areas and the numbers of cell phone users are increasing tremendously. Arunga et al (2006) proposes that cell phone has changed the way people communicate and declare, the gadget once considered for the rich businessmen and tourists is now affordable to everyone. Cell phone usage is escalating and out of the Kenyan population 37 million people, and in the year 2006 over 6 million people owned a cell phone (Market Africa Mid-East 2007).

Embu County is not left out in terms of these technological advancements; actually the County has 98 per cent mobile network coverage. According to Fahamu (2007), Cell phones are contributing to social and economical changes. Socially the cell phone is changing and creating new relationships and networks while it is used in strengthening the relationship that exists. In terms study on mobile phones and their influence on spouse relationship, much is to be done in Embu. It has not been unveiled whether there is continuous bonding or breaking of spouse relations due to usage of mobile phones so that family members can know how to respond to the continued innovations related to mobile phone technology. This research comes in hardy to examine the influence that mobile phones has to the spouse relationship a case of Tuungane Tujijenge Sacco Embu County.

#### 1.2 Problem statement

Technology is changing the way families communicate and spend time together. Many families now have smart phones which offer a hand held portal to entertainment, social networks and other distractions. Some say that these technologies are pulling families apart (Turkle, 2011) but others contend that this new medium has become an integral part of the mainstream family and aids in staying connected and with scheduling (Coyne, Fraser & Padilla-Walker, 2012). Although technology has changed the way families are communicating, it has not lessened the importance of family ties. Attachment and socialization skills are nurtured through continuous family interaction (Belcher, Peckuonis, & Deforge, 2011).

However, families in contemporary Western societies are spending more time apart on a day-to-day basis because of dual careers and shift work (Valentine, 2006), so time spent together is important, especially while on vacation. The family vacation is a long standing tradition. It is an opportunity to spend time together, bond as a family, travel to new destinations, and create memories (Hilbrecht, Shaw, Delamere, & Havitz, 2008). The goal of this research is to gain an understanding of how families are mediating the use of smart phone technology so that it does not interfere with spouse relationship in everyday life.

The use of short text messages popularly known as sms and frequent chats over the wide social networks such as facebook, whatsapp, instagram, tweeter among others has created avenues for great interactions between family members and cross cultural boundaries. There has been questions on what all these interactions has to do with the family some of which are partially answered and some remain a mystery. For example before a family member is followed on the facebook another social network is up and they have shifted focus to it. Within no time a new following is up and you are likely to get loose on the relationship than bonding it. At the same time you can make it to interact with a larger family network of members who may be spread across the existing mobile platforms. In regard to this study much will be the focus on how mobile phones have continued to influence spouse relationship with each other irrespective of the effects that the technology has created to the family.

#### 1.3 Purpose of the study

The purpose of the study is to examine influence of mobile phones to spouse relationship a case of Tuungane Tujijenge Sacco Embu County, Kenya.

#### 1.4 Objectives of the study

The following were the objectives of the study:

- 1. To establish how Communication through mobile phone influence spouse relationship, a case of Tuungane Tujijenge Sacco Embu County, Kenya.
- 2. To determine the extent to which mobile phone money transactions influence spouse relationship, a case of Tuungane Tujijenge Sacco Embu County, Kenya.
- 3. To what extent does use of applications on mobile phones influence spouse relationship, a case of Tuungane Tujijenge Sacco Embu County, Kenya.

#### 1.5 Research Questions

The following were the research questions that were answered by the study:

- 1. To what level does communication through mobile phone influence spouse relationship a case of Tuungane Tujijenge Sacco Embu County, Kenya?
- 2. To what extent does mobile phone money transactions influence spouse relationship a case of Tuungane Tujijenge Sacco Embu County, Kenya?
- 3. To what extent does use of applications on mobile phone influence spouse relationship a case of Tuungane Tujijenge Sacco Embu County, Kenya?

#### 1.6 Significance of the study

This study is of importance to different individuals who include: communities living in areas where there is continued adoption of mobile phones and their usage; family members to make informed choices where conflict may ensue; it may also benefit researchers who would want to explore more about the study of mobile phone usage influence on spouse relationship.

#### 1.7 Limitation of the study

This study was limited to influence of mobile phone usage on family relationships a case of Tuungane Tujijenge Sacco Embu County, Kenya. The target population for the study was the staffs, directors and the members of the society.

#### 1.8 Delimitation of the study

The study was carried in Tuungane Tujijenge Sacco Society Ltd within the time limit and available resources.

#### 1.9 Basic assumptions

This research assumed that the respondents would make themselves available for the study and they would give honest and unbiased answers.

## 1.10 Definition of significant terms

Spouse Relationship- from an anthropological definition means relatedness or connection

by marriage. In this study spouse relations reflect the way in which a husband and wife talk, behave, and deal with each other.

Mobile phone - A mobile phone is a wireless handheld device that allows users to make calls and send text messages, among other features, over a radio link while moving around a wide geographic area.

SACCO - is an abbreviation for Saving and Credit Cooperative. SACCOs are user-owned financial institutions that offer both savings and credit services to their Members who can be both net savers and net borrowers.

## 1.11 Organization of the study

This study is organized in five chapters. Chapter One covers the introduction and offers the background of the study, statement of the problem and the objectives of the study among other preliminary topics. Chapter Two is on literature review and presents both a theoretical and a conceptual framework on which the study is based. Chapter Three offers the research methodology while Chapter Four data analysis, presentation and interpretation. Finally, Chapter Five present a summary of the main findings of the study, discuss these against what appears in literature and also offer a conclusion and recommendation for further research.

#### **CHAPTER TWO**

#### LITERATURE REVIEW

#### 2.1 Introduction

This chapter discusses the available literature review on mobile phone usage and its relation to spouse relationship. It also touches on the family relationship, theoretical frame work where the concept of family systems is elaborated. Lastly it has the summary of the literature review and the research gap.

## 2.2 Family Relationships

"Technology is shaping family interactions in unprecedented ways, but we seem to lack a strategic commitment to the stewardship of technology. The family as a basic unit of the society needs a better, more holistic understanding of how to manage existing and coming technological advances especially the mobile phone usage. Family members need more coaching and input in order to face the countless choices they make regarding how technology affects their attention, interests, talents and resources not to forget the relationships in the families." Family bonding is defined as the amount of attachment, connection, or emotional closeness that family members feel towards each other (Bahr, Maughan, Marcos, & Li, 1998).

Mobile phones are growing in popularity because they combine social media, internet, email, texting, and mobile applications (apps) into one device and have quickly integrated into the fabric of everyday family life (Green, 2002). From the scholarly work cited above, research on mobile phone influence on family relations primarily deals with positive and negative influence settings; therefore further insight is needed for the level at which mobile phone influences such relationships. Family groups are staying connected with mobile technology because they offer flexibility and reassurance. This everyday use has spilled over into all members of the family to the extent of having students owning mobile phones at a very tender age which was a rare case some days previous.

## 2.3 Communication through mobile phones

The use of iPhones, iPads and BlackBerrys is fracturing families which are becoming isolated from one another as they focus on their screen, said Antony Kidman, leading psychologist and author of the new book *Staying Sane In The Fast Lane*. Dr Kidman said technology had a

profound effect on family dynamics, serving to push family members apart into their own "techno-cocoons". There is no doubt it is an increasing and significant issue for a lot of families. The means through which family members acquire phones can be a times a cause of family disruptions. Many members of the family have resulted to overriding the budget for crucial items.

Parents are sometimes glued to their smart phones and emails throughout the evening, while children often had computers in their bedroom used to access social networking and games, leading to very separate lives. "Humans are social creatures. There is a lot of virtual stuff going on without having any contact with people," (Dr. Kidman, 2007). According to him it is important parents set rules for the use of technology in the home, including banning computers from children's bedrooms and sitting with them occasionally while they're using devices. Mobile phones should, in most circumstances, only be introduced once children are in high school.

#### 2.3.1 Short messages service

The initial stages of this research have been conducted and preliminary findings show that individuals are creating thresholds for their technology use. Depending on the situation, individuals have created boundaries for themselves for when it is okay to use technology, when it should be restricted or on silent and when it should be off or left at home. These results are also reflected in families, as families are creating boundaries for technology use within their home and daily lives. For example, the time spent around the dining table for nightly meals is a time when most families are choosing to not allow technology to interfere. Also, many parents set up restrictions on times of day or locations within the house that technology use can take place. While on vacation, technology use is dependent on the type of vacation.

Many individuals and families are using camping as a way to leave technology behind and focus on their family. Conversely, when in the city, the smart phone is utilized as a dynamic tool for finding accommodation, navigation, information/activity searching and recommendations. The results so far suggest that families are trying to mitigate potentially negative effects of smart phone use in the family system by creating boundaries for use that are sensitive to time, location and type of family event. These boundaries are creating pockets of time that are allowing for uninterrupted family time and opportunities for bonding both in

everyday life and on vacation. In Liberia for example, people cling to their mobile phones as tools for security and safety. They use phones to combat crimes, sexual violence, and to help in medical emergencies. Globally, while mobile phone penetration correlates directly with a nation's economic, social and political levels of development, cell phones seem impervious to conflict and insecurity which extend to the family set up.

#### 2.3.2 Voice messages

According to Johnsen (2003) report results in a study of mobile phone use by teens in Norway. Johnsen found mobile messages, particularly text messages, which on the surface appeared to contain meaningless communication, actually established and nurtured connections among partners in social networks identified a similar practice consisting of "short, frequent calls, the content of which is often secondary to the act of calling" (p. 172). In both of these cases, social relations among close friends and family members were maintained through mobile communication. Often a call or text message is more a gesture than an attempt to converse about anything in particular, but these gestures serve the important purpose of reassuring links among members of social networks.

Researchers have found that Licoppe (2003) constantly checking for messages is an addiction which like other drugs can ruin your personal relationships. Sinha (2005) indicates that the low rates of cell phone penetration could underestimate the actual impact the cell phone is having during the "innovative and entrepreneurial ways, which the technology has been extended beyond the model of individual ownership". The survey shows that young adults spend up to seven hours a day interacting with communication technology and their behaviour can spill over into a problem. For some it can become a compulsion and others feel feelings of withdrawal when they are not with their phone. It is also extremely annoying to those around them. This study brings to light some of the common establishments of mobile phone usage that has influenced the spouse relationship.

#### 2.3.3 Security features; security codes and passwords usage

Mobile phones are growing in popularity because they combine social media, internet, email, texting, and mobile applications (apps) into one device and have quickly integrated into the fabric of everyday family life (Green, 2002). Through the 1990s the number of mobile phone subscribers went from almost none to a half billion people around the Although mobile phone has recently become a budding field of research, there is a recognized need for further

investigation of the social implications of this medium (Palen, Salzman, & Youngs, 2000; Rice and Katz, 2002) especially to a family spouse relationship.

## 2.4 Mobile Money Transactions

Mobile phone transactions range from money transfers to and from family members especially over long distances. This comes with the element of financial support for specific needs that may touch on health related issue or even social related issues.

#### 2.4.1 Cash Remittances

"M-Pesa" is allowing a person to send or receive money using the cell phones and to do different transaction as for examples pay bills. "M-" stands for mobile and "Pesa" means money in Swahili. Most people in Kenya utilize M-Pesa to transmit money to families and friends, as it is a swift, safe and effective technique of transferring money to anyone across the country, with no need of a bank account (Clark, 2007).

#### 2.4.2 Fraud cases

The Kenya Cyber Security Report 2014 said: "In 2013, we noted an increase in mobile money fraud targeting individuals and organisations. The fraudsters are getting innovative and very fast on finding loopholes in new controls implemented by merchants, banks and consumers." Kenyans have repeatedly reported of cases where they have lost money to fraudsters, who often start a fake SMS promotion where they will be promised rewards after they send money to certain numbers. In some cases agents are called using fake numbers so fraudsters can get access to funds and PIN numbers.

#### 2.4.3 Calling cards utilization

Airtime transfer using cell phone is another new technique that is possible with the cell phone. One person who has a cell phone can transfer call time to another cell phone to replace scratch cards. It is a supportive technique that makes it possible for people to help each other and it is seen as an added advantage particularly for those who otherwise would not afford to buy scratch cards. The technique is called Sambasa and is provided by the cell phone companies, Safaricom and Celtel and is predominantly used in East Africa. Furthermore, Sinha (2005) indicates that the low rates of cell phone penetration could underestimate the actual impact the cell phone is having during the "innovative and entrepreneurial ways, which the technology has been extended beyond the model of

*individual ownership*". The portable nature of cell phone offers the potential to being shared both in terms of access and payments.

## 2.5 Use of applications on mobile phones

Mobile phones continue to influence lifestyles of many especially through the diverse applications that are coming with smart phones. The basis of this research is to find out how these applications are influencing spouse relationships.

## 2.5.1 Photo galleries

Intuitively, lots of policy-makers assume literacy is crucial for development, but it's an increasingly interesting site of convergence between two major disciplines underpinning development work: economics and ethnographic social science, because the inadequacy of a simplistic understanding of literacy is more and more apparent. These scholars are part of the 'New Literacy' school. They criticise functional literacy because literacy is not "an independent variable that can be separated from social context" (Street 1999:35). Their understanding of literacy sees it as a set of social practices inferred from events mediated by written texts i.e. much more than just the standard reading and writing skills on the school syllabus. It is important to New Literacy scholars to note the different forms of power which affect what counts as 'literacy', who uses literacy, and for what purposes. This analysis of power is highly relevant when understand literacy's role in development, as a major concern of development is redressing power inequalities.

To 'development': there is a division between seeing development narrowly as the economic advancement of a people towards the market economies characteristic of the developed world, and broad progress towards empowered lives for people, including affirmation of their culture, political voice, and economic progress that can be sustained over generations. The dominant view in development policy-making is an "instrumental view of policy as rational problem solving" (Robinson-Pant 2008:780) and this favours policy using literacy (narrowly understood) as an instrument.

Minglang Zhou (2000) notes adults' formal illiteracy has had a negative impact on formal literacy across the whole Lahu minority-language community in South China. It's this kind of scenario economists describe as a vicious cycle: "Illiteracy in one generation means poverty for that generation, which in turn means an inability to educate the children, thereby giving

rise to another generation of illiterate adults and the cycle is ready to be repeated, trapping a whole dynasty in low human capital" (Basu et al 2008:773).

## 2.5.2 Social media platforms

Society has been reshaped around the mobile phone and the world of businesses is now far more fluid and dynamic than ever be before, with the ability to contact with colleagues around the world to share information and ideas something we take for granted.

The evolution of the mobile phone will only speed up as new innovations come to the fore and app markets deliver ever more useful and engaging tools for our devices. Clearly people care a lot about this as the hype ahead of big phone launches like the Samsung Galaxy S4 or iPhone 6 (or iPhone 5S or whatever they call it) and their new capabilities reaches fever pitch. Given the speed of this innovation - Samsung has just shown off eye-scrolling and gesture control for goodness sake, how much more sci-fi can you get? - is it likely we'll even be using 'mobile phones' as we understand them now in 40 years time?

Think about it – you have to carry a device in your pocket that requires constant checking, scrolling, typing, charging, inputting and so forth, and that is prone to damage and rapidly goes out of fashion. It strikes me that, given the rampant innovation taking place, coupled with the rise of augmented reality and wearable technology – notably Google Glass – within a decade wearable, interactive devices could well be standard technology on the market. Most definitions also identify either specific desired outcomes that young people need to achieve or critical tasks they must accomplish in order to achieve these positive outcomes (Astroth, et al 2002). The level to which a family member adopts technology in relation to mobile phone will also dictate how he or she continues to build varied relationships later on in life.

## 2.5.3 Tracking features on mobile phones

Mobile phone gadgets have Tracking system devices that use reliable GPS technology and are in use to validate whether a spouse or significant other is engaging in an extramarital affair or is still devoted. GPS tracking systems can send you email or SMS text message alerts via cellular phone if your significant other or spouse leaves or returns home. Watch from your office, home, or any remote location as your significant other travels to the places they are so secretive about. Know the truth and learn it in real-time!

Infidelity is sadly an unfortunate thing that can occur in our lives and can be devastating to any family or relationship. With temptation, stress and pressure facing people more now than ever before, many people in a relationship or marriage are crossing the line of fidelity to infidelity. Often labeled cheaters, these type of people used to engage in the behavior viewed as immoral and indecent and get away scott-free. However, technology has recently provided an answer to catch these cheaters with the help of GPS tracking systems.

The first problem many people in a relationship or marriage suspecting a partner of infidelity face is that the cheater knows what they are doing is wrong. Since the cheater is aware that their indiscretions could cause trouble they do everything they can to hide them. This study was focused to unveil the use of such devices by spouses to track their partners in case they are suspecting infidelity.

#### 2.6 Theoretical Framework

This study will be guided by the theory of family systems.

## **2.6.1** The Concept of Family Systems

The aim of this research is to understand the influence that mobile phones are having on spouse relationship using a family systems perspective as the theoretical lens. Family systems theory suggests that members of the family are all interdependent and interactions between them create an open and continuous system that is always being influenced by the environment (Hill, 1971).

Family systems are self-regulating, open systems and the added technological component converts inputs and outputs from the family members and plays a major role in self-regulating within the system (Trist, 1981). In this case, the smart phone is a technological system inside the family system and interactions with each other and the smart phone will be discussed and observed. Therefore, the first research objective is to discover if and how families negotiate and/or regulate smart phone use within the family system.

Family Systems Theory is based on General System Theory (von Bertalanffy, 1968) which has some core assumptions applicable to all systems. These assumptions include that a system must be comprehended as a whole rather than individual parts and that human systems are distinctive in their ability to have self-reflexivity. Hill (1971) further states that

that families tend to seek successful solutions to problems and then adapt those solutions to become normative behaviour (Cheal, 1991). Ackoff & Emery (1972) believe that purposeful systems have environments that affect the system, therefore each system can be considered to be a system within a greater supra-system. As a consequence, adaptive system behaviour within families will be analysed in reference to their smart phone use in two different environments, daily life and vacation, to see how they mediate this technology use within the family and if the environment of the family vacation acts as a catalyst for change in behaviour.

Due to the interdependent nature of families and family dynamics, a philosophical hermeneutic approach (Gadamer, 1977) is being used in an effort to understand both individual and global issues within the family group (Geertz, 1979). The hermeneutic approach, as a means to achieve an ethnographic understanding, can be explained as the circle of continuous tacking between the most minute details and global details to bring both into light concurrently (Geertz, 1979). With this approach, one must understand the whole of the intentions, beliefs, and context in order to understand the sentence, utterance, or act (Denzin & Lincoln, 2000). This form of research leads to thick descriptions, which Geertz (1979) describes as a multiplicity of complex structures which are knotted into one another. The family today refers to a complex social reality (Popenoe, 2012) with different structures and cultural norms. This research will specifically look at family groups that have a traditional family at the core, with a mother and father and at least one child. In regard to this study, the term family systems is used to examine the influence of mobile phones usage on family relationships and how these influences can be handled once they are known.

#### 2.7 Conceptual Framework

According to Bogdan and Biklen (2003), a conceptual framework is a basic structure that consists of certain abstract blocks which represent the observational, the experiential and the analytical or synthetically aspects of a process or system being conceived. The interconnections of these blocks complete the framework for certain expected outcomes. An independent variable is a variable which is presumed to affect or determine a dependent

variable. It can be changed as required and its values do not represent a problem requiring explanation in an analysis, but are taken simply as given (Dodge, 2003).

The independent variables in this study are: to establish how communication through mobile phone influence spouse relationship, to know the extent to which mobile money transactions influence spouse relationship and to know the extent to which use of applications on mobile phone influence spouse relationship in Tuungane Tujijenge Sacco Society Ltd. A dependent variable is what is measured in the experiment and what is affected during the experiment. The dependent variable responds to the independent variable. The dependent variable in this study is spouse relationships. This is illustrated in the figure 1.

# **2.7 Conceptual Framework Independent variables**

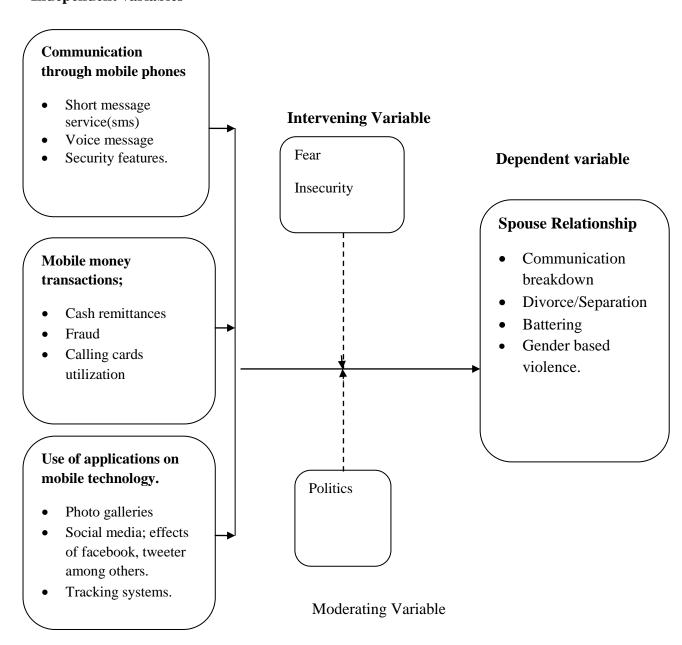


Figure 1: Conceptual framework

## 2.8 Summary of Literature Review and Knowledge gap

The literature review of this study reflects that there is a wealth of research into family relationships, however, there is little information about whether (and if so how) mobile phones usage has impacted on this process.

The study reflects mobile communication as an influence on family relationships, mobile money transactions and applications used on mobile phones as an influence on family relationships. This study did not consider about how culture can be used as a solution or a factor of consideration to tackle mobile influence on family relationships. There is therefore need for further research on culture as a determinant.

#### **CHAPTER THREE**

#### RESEARCH METHODOLOGY

#### 3.1 Introduction

This chapter outlines the research design, target population, sampling techniques, sampling size, data collection methods, data collection instruments, reliability and validity of the data collection instruments. It finally presents an operation of variables table.

## 3.2 Research Design

Descriptive study method was used in this study. The purpose of a descriptive research is to describe behaviors and characteristics. A descriptive design is concerned with determining the frequency with which something occurs or the relationship between variables (Bell and Bryman, 2003). For the purposes of obtaining adequate and relevant information in a short time, the survey method was used to collect the data. Quantitative study design using questionnaires and data analysis is deemed appropriate for this study because it facilitated gathering of opinions of the influence of mobile phones use on spouse relationship a case of Tuungane Tujijenge Sacco Embu County, Kenya and a precursor to quantitative studies and analysis.

## 3.3 Target Population

The population in each of the institutions for these categories is as shown in Table 3.1.

**Table 3.1: Target Population** 

Category	Population
Directors	12
Staffs	8
Members	1790
Total Population	1810

Source: Office of the Chief Executive Officer, TTS (2015)

The study members of TTS and was based in Embu County. There were three sub counties where respondents were drawn and these were Runyenjes, Manyatta and Mbeere. This study was conducted in these sub-counties and was focused on influence of mobile phones on spouse relationship. Respondents were composed of directors, staffs and members who were the Sacco members.

## 3.4 Sampling Procedures and Sample Size

The study consisted of a total of 317 respondents representing the directors, staffs and members. Based on Krejcie and Morgan's (1970) table for determining sample size, for a given population of 1810, a sample size of 317 respondents would be appropriate to adequately represent a cross-section of the population at 95% confidence level, as shown in appendix 9. Stratified random sampling will be used basing the number of households. This was put on a sampling frame as shown in Table 3.2, and from this the sub samples were chosen at random. The sum of each of the sub samples gave the total sample size (Jankowicz, 2002).

**Table 3.2 Sampling Technique** 

<b>Sub-county</b>	Population	Sample
1. Runyenjes	600	105
2. Manyatta	909	159
3. Mbeere	301	53
Totals	1,810	317

Sample size= target population/total population× sample size

#### 3.5 Data Collection Methods

This research used both primary and secondary data. According to Kothari (2003) primary data is data collected from immediate source for the purpose of the study while secondary data by a person or organization other than a researcher. Data was collected using both close ended and open ended questionnaires. They were cheap to administer to the respondents who are spread in a large project area. Interviews will also be conducted.

## 3.6 Instrument Validity

'Validity is the accuracy and meaningfulness of inferences, which are based on research results, it is the degree to which results obtained from the analysis of the data actually represent the phenomenon under study', Mugenda and Mugenda (2004). Put differently, validity is the degree to which a test measures what it purports to measure. The instrument was availed to experts from the Department of Extra Mural Studies and peers who established its content and construct its validity in order to ensure that the questionnaire include an adequate and representative set of items which contain the dimension and elements of concepts under study. To enhance validity of instrument in this study, the questionnaire was reviewed by experts in the subject matter, particularly my supervisors.

#### 3.7 Reliability of the Instruments

Pilot/ pre-test was done to ensure that questions in the questionnaire are stated clearly and have the same meaning to all respondents. The respondents in which they are tested were not be part of the selected sample (Mugenda and Mugenda, 2003). This test was done to a few Sacco directors of the three sub-counties. Computation of scores was done using Pearson Product-Moment correlation coefficient Formula.

$$\mathbf{r} = \frac{\mathbf{n}(\sum \mathbf{x}\mathbf{y}) - (\sum \mathbf{x})(\sum \mathbf{y})}{\sqrt{\left[\mathbf{n}\sum \mathbf{x}^2 - (\sum \mathbf{x})^2\right]\left[\mathbf{n}\sum \mathbf{y}^2 - (\sum \mathbf{y})^2\right]}}$$

Where,

r = Pearson correlation coefficient

x = Values in first set of data

y = Values in second set of data

n = Total number of values.

A correlation coefficient of 0.8 was obtained and therefore the instrument was deemed reliable and measurable.

#### 3.8 Data Analysis

The questionnaires were edited with the aim of checking on completeness, clarity and consistency in answering research questions. The data was coded, tabulated and analyzed using Statistical Package for Social Sciences and MS Excel based on study objectives. Descriptive statistics was computed and study findings presented using percentages and tables and interpretations made.

#### 3.9 Ethical Considerations

All the respondents were treated with respect and any research assistant employed in this exercise were taught on the essence of ethics when assisting the researcher in data collection or analysis. The enumerators and the respondents were informed clearly on the purpose of the study and each respondent was politely requested to fill the questionnaire and were assured of confidentiality on any information that he or she provided in the questionnaire.

# 3.10 Operationalization of variables

# **Table 3.3 Operationalization of Variables**

Objecti	ives	Type of variable	Indicator(s)	Measurements.	Measurement scale.	Tools of analysis.	Data analysis
1.	To establish how communication through mobile phones influence spouse relationship, a case of Tuungane Tujijenge Sacco Embu County, Kenya.	unication through e phones influence	Short message service (sms).	Types of sms sent.	ordinal	Percentages means.	descriptive
		through mobile phones	Voice message.	Type of calls made by family members	ordinal	Percentages means	descriptive
			Security features; Passwords and security codes access.	How many members use passwords and security codes.	Ratio	Percentages means	descriptive
2.	To determine the extent to which mobile phone money transactions influence spouse relationship, a case of Tuungane Tujijenge Sacco Embu County,	Mobile money transactions.	Cash remittances	Available mobile money platforms used	Ratio	Percentages means	descriptive
				How many members participate in remittances	Ratio	Percentages means	descriptive
	Kenya.			Gender of the members	Ratio	Percentages means	descriptive
			Fraud	How many members have experienced fraud.	ordinal	Percentages means	descriptive
			Calling cards utilization.	Cost of calling cards utilized.	Ratio	Percentages Means	Descriptive

3. To what extent does Use of applications on mobile phone influence spouse relationship, a case of Tuungane Tujijenge Sacco Embu County, Kenya	Use of mobile applications	Photo galleries	Types of photos under storage on phones memories	Ratio	Percentages Means	descriptive
		Social media; effects of facebook, tweeter among others.	Type of social media under usage on mobile phones	Ratio	Percentages Means	descriptive
		Tracking systems.	Existing family conflicts	Ratio	Percentages means	descriptive
	Dependent spouse relationships		Levels of communication breakdown associated with mobile phone usage	Ordinal	Percentages means	descriptive
			Types of spouse relationships existing	Ordinal	Percentages Means	Descriptive
			The levels of conflict witnessed in family related to mobile phone usage.	Ordinal	Percentages means	descriptive

#### **CHAPTER FOUR**

## DATA ANALYSIS, PRESENTATION AND INTERPRETATION

#### 4.1 Introduction

This chapter contains data analysis, presentation and interpretation of findings. The study intended to examine the influence of mobile phones on spouse relationship a case of Tuungane Tujijenge Sacco, Embu County, Kenya. The chapter discusses results of the study under the following headings: questionnaire return rate, demographic characteristics of the respondents, objectives of the study namely; how Communication through mobile phone influence spouse relationship, how mobile phone money transactions influence spouse relationship and how use of applications on mobile phones influence spouse relationship, a case of Tuungane Tujijenge Sacco, Embu County, Kenya.

#### **4.2 Questionnaire Return Rate**

From the study, the questionnaire return rate was 311 (98.1 %), as 317 questionnaires were used. This was possible because the questionnaires were administered by trained research assistants who administered questionnaires, waited for the respondent to complete and collect immediately.

#### 4.3 Demographic Characteristics of the respondents

This section discusses the respondent's gender, age, marital status, level of education and state of employment of the respondents. These social attributes were relevant to the study since they enabled the respondent to provide information that is valid, reliable and relevant to the study.

## 4.3.1 Study respondents by gender

The respondents from Tuungane Tujijenge Sacco were asked to indicate their gender. The responses are shown in Table 4.1.

**Table 4.1** Gender of the respondents

Gender of respondent	Frequency	Percentage	
Male	44	14.1	
Female	267	85.9	
Total	331	100.0	

The study findings indicated that 85.9 % s of the respondents were females who were more than 14.1 % respondents who were males. This shows that majority of the respondents were females. Women join development groups more than men.

## 4.3.2 Study respondents by age

The respondents were asked to indicate their ages from among choices of age classes given. The respondents responses are shown in Table 4.2.

**Table 4.2** Age of respondents

Age of respondent		
in years	Frequency	Percentage
18-35	120	38.5
35-60	117	37.6
60-85	74	23.8
Total	311	100

The findings show that 38.5 % of the respondents are in the age bracket of 18-35 years and hence youthful while 37.6% of respondents are in the age bracket of 35-60 years.

#### 4.3.3 Marital status of the respondents

The respondents were asked to indicate their marital status. The responses are shown in Table 4.3.

**Table 4.3** Marital status of the respondents

Table 4.5 Martial status of the respondents				
Marital status	Frequency	Percentage		
Married	281	90.4		
Single	7	2.3		
separated	18	5.8		
Divorced	5	1.6		
Total	311	100.0		

The findings indicated that majority of the respondents 90.4 are married. Marriage ascribes familial responsibilities to group members and therefore they become more serious in their Sacco. The study has also shown that 39.2% have stayed in their marriage for 6-10 years while 36.7% of the respondents have stayed in their marriage for 11-15 years.

#### 4.3.4 Level of education of the respondents

The respondents were asked to indicate their level of education. The responses are shown in Table 4.4.

Table 4.4 level of education of the respondent

Period in years	Frequency	Percentage	
Primary level	226	72.7	
secondary	59	19.0	
College level	26	8.4	
Total	311	100.0	

The findings indicated that majority of the respondents 72.7 reached primary level of education with only 8.4% reaching college level. This shows that the Sacco members have low levels of education.

#### **4.3.5** State of employment of the respondents

The respondents were asked to indicate their state of employment. The responses are shown in Table 4.5.

Table 4.5 State your type of employment

Period in years	Frequency	Percentage	
Government employment	19	6.1	
Sacco employment	5	1.7	
Self employment	276	88.7	
Others eg shop attendant	11	3.5	
Total	311	100	

The study has shown that majority of the respondents (88.7%) are self employed most especially in farming while only 1.7% are employed in the Sacco. This shows that only a few members have formal employment. The study has also shown that among the sample respondents 0.6% were directors while 1.6% are Sacco staff. The rest 97.8% are ordinary members.

#### 4.4 Influence of communication through mobile phones on spouse relationship

This section sought to investigate how communication through mobile phones on spouse relationship. This section focused on how different aspects of communication through mobile phones influence spouse relationships.

#### 4.4.1 Communication through mobile phones and spouse relationship

The respondents were asked to indicate the influence of communication through mobile phones on spouse relationships and Table 4.6 and table 4.7 show the responses

Table 4.6 Influence of communication through mobile phones and spouse relationships

Aspect	Strong	gly	Agree		Neutra	.1	Disagı	ree	Strong	
	agree								disagr	ee
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
My communication on mobile phone negatively affects my relationship with my spouse	36	11.6	40	12.9	12	3.9	202	65	21	6.8
The messages received over the Mobile phones have led to suspicion on cheating by my spouse.	26	8.4	186	59.8	47	15.1	42	13.5	10	3.2
Receiving external calls by my spouse always interrupts our talk hence affecting our relationship.	64	20.6	122	39.2	12	3.9	99	31.8	14	4.5
I always share my mobile phone password or security code with my spouse whenever asked for.	140	45.0	114	36.7	13	4.2	33	10.6	11	3.5
Unshared passwords and security codes restrict our spouse open communication and create fear and insecurity.	93	29.9	156	50.2	26	8.4	27	8.7	9	2.9
My spouse is normally tensed when receiving calls or using their phones in my presence.	71	22.8	132	42.4	22	7.1	43	13.8	43	13.8
Mean	64	20.6	255	82	21	6.7	68	21.9	19	6.1

The study showed that 65% agreed that communication on mobile phone positively affects relationship with spouse, 59.8 % agreed that the messages received over the mobile phones have led to suspicion on cheating by spouse, 39.2 % agreed that receiving external calls by spouse always interrupts our talk hence affecting spouse relationship, 45 % strongly agree that mobile phone password or security code are shared among spouses whenever asked for and 50.2 % agreed that unshared passwords and security codes restrict our spouse open

communication and create fear and insecurity. On average 255 respondents (82%) agreed on all aspects.

Table 4.7 Communication through mobile phones and spouse relationship

Influence	Frequency	Percentage
Has enhanced the relationship and families has become better	83	26.7
Sometimes lead to break up and bad relationships	83	26.7
Makes people lies/switching off the phone leads to suspicion	82	26.4
Leads to openness especially money transactions	63	20.3
Total	331	100.0

The study has shown that 26.7% of the respondents believed that communication through mobile phones has enhanced spouse relationship and families has become better and sometimes led to break up and bad relationships while 20.3% of respondents believed that communication through mobile phones has led to openness especially on money transactions.

#### 4.5 Influence of mobile money transactions on spouse relationships

This section sought to determine the extent of mobile money transactions influence on spouse relationships.

#### 4.5.1 How mobile money transactions influence spouse relationships

The respondents were asked to indicate how mobile money transactions has influenced spouse relationships and their responses are shown in Table 4.8 and Table 4.9.

Table 4.8 Influence of mobile money transactions influence on spouse relationships

Aspect	Strong	ly	Agree		Neutra	1	Disagr	ee	Strong	•
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Sending money to friends and other extended family members creates conflict with my spouse.	64	20.6	111	35.7	32	10.3	91	29.3	13	4.2
Receiving money from external parties has always raised a concern from my spouse.	57	18.3	115	37.0	28	9.0	98	31.5	13	4.2
Fraud on Mobile phone money transactions has affected my marriage relationship.	100	32.2	69	22.2	10	3.2	93	29.9	39	12.5
The use of calling cards on phones has resulted to untimely budgets and unnecessary expenditures while distributing to friends thus affecting our spouse relationship.	133	42.8	138	44.4	15	4.8	18	5.8	7	2.3
Mean	88	28.3	108	34.7	21	6.8	75	24.1	18	5.8

The study showed that 35.7% agreed that sending money to friends and other extended family members creates conflict with spouse, 37% agreed that receiving money from external parties has always raised a concern from spouse, 22.2% agreed that fraud on mobile phone money transactions has affected spouse relationship and 44.4% agreed that the use of calling cards on phones has resulted to untimely budgets and unnecessary

expenditures while distributing to friends thus affecting spouse relationship. On average 108 respondents (34.7%) agreed on all aspects.

Table 4.9 Mobile phone money transactions and spouse relationships

Aspect	Frequency	Percentage
Has led to positive relationships	132	42.4
Makes us get help and assistance easier	86	27.7
Have improved livelihoods/financial savings	52	16.7
Help families to develop since distance is reduced	37	11.9
Increases expenses and debt related to phones	4	1.3
Total	311	100.0

From the study, 42.4% of the respondents believed that mobile phone money transactions has led to positive relationships, 27.7% believed that it makes families get help and assistance easier while 16.7% believed that it has improved livelihoods and financial savings. Some respondents (1.3%) believed that mobile phone money transactions have led to increased expenses and debt related to phones.

#### 4.6 Influence of mobile phones applications use on spouse relationship

This section sought to determine the extent of mobile phones applications use on spouse relationship.

#### **4.6.1** How use of mobile phones applications influence spouse relationship.

The respondents were asked to indicate how use of mobile phones applications influence spouse relationship and responses are shown in Table 4.10.

 $Table \ 4.10 \ How \ mobile \ phones \ applications \ use \ influence \ spouse \ relationship$ 

Aspect	Strong agree	gly	Agree		Neutra	1	Disagr	ree	Strong disagr	
	Freq.	%	Freq.	%	Freq.	%	Freq.	%	Freq.	%
Photo galleries accessed on my spouse mobile phone has demonstrated promiscuity and a concern of insecurity.	112	36	117	37.6	35	11.3	36	11.6	11	3.5
My addiction to social media has affected my spouse commitment to our relationship.	60	19.3	75	24.1	53	17	85	27.3	38	12.2
Use of mobile phones has made it possible to trace the location of my spouse hence enhancing my control over our	75	24.1	115	37.0	45	14.5	66	21.2	10	3.2
relationships The use of phones has enhanced ways of relating with my spouse especially over long distances.	79	25.4	147	47.3	21	6.8	45	14.5	19	6.1
Frequent calls and texts from my spouse render me uncomfortable raising concern of mistrust.	94	30.2	117	37.6	50	16.1	33	10.6	17	5.5
Mean	84	27	114	36.7	41	13.1	53	17	19	6.1

The study showed that 37.6% agreed that photo galleries accessed on my spouse mobile phone has demonstrated promiscuity and a concern of insecurity, 27.3 % disagreed that addiction to social media has affected spouse commitment to their relationship, 37 % agreed that use of mobile phones has made it possible to trace the location of their spouse hence enhancing control over their relationship, 47.3 % agreed that the use of phones has enhanced ways of relating with spouse especially over long distances and 37.6% agreed that frequent calls and texts from spouse render them uncomfortable raising concern of mistrust affecting their spouse relationship. On average 114 respondents (36.7%) agreed on all aspects.

### 4.7 Family relationships

The researcher carried out an observation schedule and interview schedule on the members of the Sacco.

#### 4.7.1 Observation schedule of members

The researcher carried out an observation schedule of the Sacco members and their responses are shown on Table 4.11.

Table 4.11 Family relationships of Sacco members

Aspect	Response	Frequency	Percentage				
Do members own	Yes	280	90				
phones	No	31	10				
Are there financial	Yes	124	40				
constrains associated with mobile phone	No	187	60				
What is the economic	Farming	161	52				
activity of the members	Business	149	48				
What is the general	Fast in take up	202	65				
trend of mobile replacement with	Slow intake up	93	30				
regard to new innovation	Don't bother	16	5				
What is the common	Grouping	149	48				
social practice of the phone	Circumcision	37	12				
	religion	125	40				
Which members of	males	44	15.5				
the family own mobile phones	Female	240	84.5				
Social media	Email	140	45				
platforms engaged in by spouses	Facebook	93	30				
	Whatsapp	62	20				
	Twitter	16	5				

From the study, 90% of Sacco members own phones with all males in the Sacco (15.5%) owning phones, 52 % of the members are in farming while 48% are in business including miraa business. The Sacco members use various social platforms like email (45%), facebook (30%), whatsapp (20%) and twitter (20%).

#### 4.7.2 Interview schedule of the Sacco members

The researcher carried out an interview schedule of the Sacco members and their responses are shown on Table 4.12.

**Table 4.12: Interview schedule of the Sacco members** 

Aspect	response	Frequency	Percentage
How often do you receive or send	Once a day	156	50
money	Many times a day	62	20
to your spouse as compared to other people	Rarely	93	30
Has mobile phone usage raised any family problem	Yes	103	33
	No	208	67
Have you witnessed any case related to	Yes	72	23
mobile phone fraud in your family	No	239	77
When do you use security codes and	While at home	72	23
passwords in your phone?	While at work	99	32
	All the time	140	45
How regular do you share your phone	Regularly	115	37
with the spouse	Rarely	137	44
	Not all	59	19
Does your phone help to enhance relationship with family members	Yes	236	76
relationship with raining members	No	75	24
Do you require privacy while handling	Yes	196	63
your phone calls	No	115	37
Have you ever lend friends airtime or	Yes	109	35
cash via mobile phone and has affected in any way future relationship with your	No	202	65
spouse Does phone use relate to your family expenditure trend thus affecting your	Yes	131	42
relationship with your spouse	No	180	58

From the study, 50% of Sacco members have often received or send money to spouse as compared to other people, 23% of Sacco members have witnessed cases related to mobile phone fraud in the family, 63% of Sacco members require privacy while handling phone calls and 42% of Sacco members indicated that phone use relate to family expenditure trend thus affecting relationship with spouse.

#### 4.8 Summary of the Chapter

The data collected was analysed using Statistical Package for Social Sciences and tables were used to present data in APA table format. The questionnaire return rate was 311 (98.1 %), as 317 questionnaires were used for members, staff and directors of Tuungane Tujijenge Sacco, Embu County, Kenya. The data interpretation focused on the influence of mobile phones on spouse relationship in Tuungane Tujijenge Sacco based how Communication through mobile phone influence spouse relationship, how mobile phone money transactions influence spouse relationship and how use of applications on mobile phones influence spouse relationship in Tuungane Tujijenge Sacco, Embu County, Kenya.

#### **CHAPTER FIVE**

## SUMMARY OF FINDINGS, DISCUSSION, CONCLUSIONS AND RECOMMENDATIONS

#### 5.1 Introduction

This chapter focuses on the summary of findings of the study which formed the foundation for discussions. The discussions provided a firm basis upon which conclusions and recommendations were advanced to examine the influence of mobile phones on spouse relationship: a case of Tuungane Tujijenge Sacco Embu County, Kenya. It also includes suggested areas for further research.

#### 5.2 Summary of Findings

The summary of findings is presented based on the three objectives of the study.

# 5.2.1 The summary of the findings based on objective one which was to establish how communication through mobile phone influence spouse relationship in the family, a case of Tuungane Tujijenge Sacco Embu County, Kenya.

From the analysis 65% agreed that their communication on mobile phone positively affects their relationship with their spouse, 59.8 % agreed that the messages received over the mobile phones have led to suspicion on cheating by their spouse, 39.2 % agreed that receiving external calls by spouse always interrupts their talk hence affecting relationship, 45 % strongly agree that they always share mobile phone password or security code with spouse whenever asked for and 50.2 % agreed that unshared passwords and security codes restrict spouse open communication and create fear and insecurity.

The study deduced that 26.7% of the respondents believed that communication through mobile phones has enhanced the relationship and families have become better and sometimes led to break up and bad relationships while 20.3% of respondents believed that communication through mobile phones has led to openness especially on money transactions.

# 5.2.2 The summary of the findings based on objective two which was to determine the extent to which mobile phone money transactions influence spouse relationship, a case of Tuungane Tujijenge Sacco Embu County, Kenya.

The study established that 35.7% agreed that sending money to friends and other extended family members creates conflict with spouse, 37% agreed that receiving money from external parties has always raised a concern from spouse, 22.2% agreed that fraud on Mobile phone money transactions has affected spouse relationship and 44.4% agreed that the use of calling cards on phones has resulted to untimely budgets and unnecessary expenditures while distributing to friends thus affecting relationship.

From the study, 42.4% of the respondents believed that mobile phone money transactions has led to positive relationships, 27.7% believed that it makes families get help and assistance easier while 16.7% believed that it has improved livelihoods and financial savings of the group members. Mobile phone money transactions have led to increased expenses and debt related to phones as indicated by 1.3% of the respondents.

# 5.2.3 The summary of the findings based on objective three which was to what extent does use of mobile phones applications influence spouse relationship, a case of Tuungane Tujijenge Sacco Embu County, Kenya.

From the study, 37.6% of the respondents agreed that photo galleries accessed on spouse mobile phone has demonstrated promiscuity and a concern of insecurity, 27.3 % of the respondents disagreed that addiction to social media has affected spouse commitment to their relationship, 37 % of the respondents agreed that use of mobile phones has made it possible to trace the location of spouse hence enhancing control over relationship, 47.3 % of the respondents agreed that the use of phones has enhanced ways of relating with spouse especially over long distances and 37.6% of the respondents agreed that frequent calls and texts from spouse render them uncomfortable raising concern of mistrust affecting spouse relationship. On average 114 respondents (36.7%) agreed on all aspects.

The study that indicated that 90% of Sacco members own phones with all males in the Sacco (15.5%) owning phones, 52 % of the members are in farming while 48% are in business including miraa business. The Sacco members use various social platforms like email (45%), facebook (30%), whatsup (20%) and twitter (20%).

From the study, 50% of Sacco members have often received or send money to spouse as compared to other people, 23% of Sacco members have witnessed cases related to mobile phone fraud in the family, 63% of Sacco members require privacy while handling phone calls and 42% of Sacco members indicated that phone use relate to family expenditure trend thus affecting relationship with spouse.

#### **5.3 Discussion of Findings**

A discussion of findings of the study is presented based on the three objectives of the study.

#### 5.3.1 The influence of Communication through mobile on spouse relationship

The study showed that 65% of respondents agreed that their communication on mobile phone positively affects their relationship with their spouse. This agrees with Coyne, Fraser & Padilla-Walker (2012) who believes that communication technology has become an integral part of the mainstream family and aids in staying connected and with scheduling. The study further agrees with Arunga et al (2006) who propose that cell phone has changed the way people communicate and declare, the gadget once considered for the rich businessmen and tourists is now affordable to everyone and can build family relationships. The study indicated that 39.2 % of respondents agreed that receiving external calls by spouse always interrupts their talk hence affecting their relationship. This agrees with Turkle (2011) who stated that communication technologies are pulling families apart.

The study has shown that 26.7% of the respondents believed that communication through mobile phones has enhanced the relationship and families have become better and sometimes led to break up and bad relationships. This agrees with Kidman (2007) who stated that the use of iPhones, iPads and BlackBerrys is fracturing families which are becoming isolated from one another as they focus on their screen. Kidman (2007) further stated that the means through which family members acquire phones can be at times a cause of family disruptions.

#### 5.3.2 The influence of mobile phone money transactions on spouse relationship

The study showed that 22.2 % of respondents agreed that fraud on mobile phone money transactions has affected their spouse relationship. This is supported by Kenya Cyber Security Report (2014) who reported that Kenyans have repeatedly reported of cases where they have lost money to fraudsters, who often start a fake SMS promotion where they will be promised rewards after they send money to certain numbers. In some cases agents are called using fake numbers so fraudsters can get access to funds and PIN numbers.

From the study, 42.4% of the respondents believed that mobile phone money transactions has led to positive relationships, 27.7% believed that it makes families get help and assistance easier while 16.7% believed that it has improved livelihoods and financial savings of the group members This agrees with Fahamu (2007) who stated that cell phones are contributing to social and economical changes. Fahamu (2007) further stated that the cell phone is changing and creating new relationships and networks while it is used in strengthening the relationships that exists.

#### 5.3.3 The influence of mobile phones applications use on spouse relationship

The study indicated that 37.6% of the respondents agreed that photo galleries accessed on spouse mobile phone has demonstrated promiscuity and a concern of insecurity, 27.3 % of the respondents disagreed that addiction to social media has affected spouse commitment to their relationship. This is supported by Hilbrecht, Shaw, Delamere, & Havitz (2008) who stated that mobile phone applications should make an opportunity for families to spend time together, bond as a family, travel to new destinations and create memories. The study has also shown that 37 % of the respondents agreed that use of mobile phones has made it possible to trace the location of their spouse hence enhancing control over their relationships. This agrees with Belcher, Peckuonis, & Deforge (2011) who stated that although technology has changed the way families are communicating, it has not lessened the importance of family ties. Attachment and socialization skills are nurtured through continuous family interaction.

The study indicated that 90% of Sacco members own phones with all males in the Sacco (15.5%) owning phones. This agrees with Arunga et al (2006) who proposes that cell phone has changed the way people communicate and declare, "the gadget once considered for the rich businessmen and tourists is now affordable to everyone". The Sacco members use various social platforms like email (45%), facebook (30%), whats up (20%) and twitter (20%). This collaborates study by Green (2002) who stated that mobile phones are growing in popularity because they combine social media, internet, email, texting, and mobile applications (apps) into one device and have quickly integrated into the fabric of everyday family life.

The study showed that 50% of Sacco members have often received or send money to spouse as compared to other people, 63% of Sacco members require privacy while handling phone calls and 42% of Sacco members indicated that phone use relate to family expenditure trend

thus affecting relationship with spouse. This is supported by Bahr, Maughan, Marcos, & Li, (1998) who pointed out that family members need more coaching and input in order to face the countless choices they make regarding how technology affects their attention, interests, talents and resources not to forget the relationships in the families.

#### **5.4 Conclusions of the study**

The followings conclusions were made from the study:

It can be concluded that communication through mobile phone influence spouse relationship. Communication on mobile phone affected spouse relationship positively while receiving external calls by spouse always interrupts talking and hence affects spouse relationship. Communication through mobile phones has enhanced the relationship and families have become better and but sometimes led to break up and bad relationships.

It can also be concluded that mobile phone money transactions influence spouse relationship. Mobile phone money transactions has led to positive relationships, improved livelihoods and financial savings of the group members, enabled spouses to get help and assistance easier but has also led fraud on mobile phone money transactions thus affecting spouses negatively.

It can also be concluded that mobile phones applications use on spouse relationship. Mobile phones applications use like photo galleries accessed on spouse mobile phone has demonstrated promiscuity and a concern of insecurity and addiction to social media has affected spouse commitment to spouse relationship negatively.

#### 5.5 Recommendations

Based on the research findings and conclusions the study recommends that:

- 1. Communication on mobile phones should be controlled in order for it to build spouse relationships.
- 2. Mobile phone money transactions should enhance spouse relationship and improve livelihoods and financial savings of members. Fraud on mobile phone money transactions should be controlled since it affects spouses negatively.
- 3. Use mobile phones applications should be checked to avoid affecting spouses negatively because photo galleries accessed on spouse mobile phone has demonstrated promiscuity and a concern of insecurity. Addiction to social media should be controlled since it affects spouse commitment to spouse relationships negatively.

### **5.6** Suggested areas for further Research

Another study should be done to;

- 1. Investigate the influence of mobile phones to family relationships in other parts of Kenya.
- 2. Find out the social economic benefits of social media on the families.
- 3. Find out the influence of information and communication technology on youth development in Kenya.

#### REFERENCES

- Agate, J. R., Zabriskie, R.B., Agate, S., & TaylorPoff, R. (2009). Family Leisure Satisfaction and Satisfaction with Family Life. *Journal of leisure research*, 41(2), 205-223.
- Ainsworth, M. D., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Lawrence Erlbaum.
- Arunga, J. & Kahora, B. "Cell Phone Revolution in Kenya (2007)". Available at:http://www.brunoleoni.servingfreedom.net/Papers/IBL\_Arunga\_Kenya.pdf.[Access ed: 2007-11-30].
- Blum, D. (2002). *Love at Goon Park: Harry Harlow and the science of affection*. New York, NY: Basic Books. Perseus Publishing.
- Bowlby, J. (1973). Separation: Anxiety and anger: Attachment and Loss Volume 2. New York, NY: Basic Books.
- Bahr, S. J., Maughan, S. L., Marcos, A. C., & Li, B. (1998). Family, Religiosity, and the Risk of Adolescent Drug Use. *Journal of Marriage and Family*, 60(4), 979-992.
- Belcher, J. R., Peckuonis, E. V., & Deforge, B. R. (2011). Family Capital: Implications for Interventions with Families. *Journal of Family Social Work*, 14(1), 68-85.
- Campbell, S. W., & Ling, R. (2009). Effects of mobile communication. In J. Bryant & M. B.
- Cheal, D. J. (1991). Family and the state of theory. New York: Harvester Wheatsheaf.
- Oliver (Eds.), *Media effects: Advances in theory and research* (3rd ed., pp. 592–606). New York, NY: Routledge.
- Chesley, N. (2005). Blurring boundaries: Linking technology use, spillover, individual distress, and family satisfaction. *Journal of Marriage and Family*, 67, 1237–1248.
- Chugani, H. T, Behen, M. E, Muzik, O., Juhász, C., Nagy, F., & Chugani, D. C. (2001).
  Local brain functional activity following early deprivation: A study of postinstitutionalized Romanian orphans. *NeuroImage*, 14, 1290–1301.
- Clark, M. "Unserved by Banks, Poor Kenyans Now Just Use a Cell phone (2007)". Available at:http://www.comminit.com/en/node/266538/307 [Accessed: 2008-03-20]
- Colmer, K., Rutherford, L., & Murphy, P. (2011). Attachment theory and primary caregiving. Australasian Journal of Early Childhood, 36, 16–20.
- Cooper, A., Galbreath, N., & Becker, M. A. (2004). Sex on the Internet: Furthering our understanding of men with online sexual problems. *Psychology of Addictive Behaviors*, *18*, 223–230.

- Cozolino, L. (2006). The neuroscience of human relationships: Attachment and the developing social brain. New York, NY: Norton.
- Epstein, S. (1990). Cognitive-experiential self-theory. In L. A. Previn (Ed.), *Handbook of personality: Theory and research* (pp. 165–192). New York, NY: Guilford.
- Fahamu (2007). Available at :http://www.kiwanja.net/database/document/report\_fahamu\_mobile\_activism.pdf [Accessed: 2008-03-09]
- Feinberg, T. E. (2009). From axons to identity: Neurological explorations of the nature of the self. New York, NY: Norton.
- Galinsky, E., Kim, S. S., & Bond, J. T. (2001). Feeling Overworked: when work becomes too much. New York, NY: Families and Work Institute.
- Grawe, K. (2007). *Neuropsychotherapy: How neurosciences inform effective psychotherapy*. New York, NY: Psychology Press.
- Geertz, C. (1979). On the Nature of Anthropological Understanding. In P. Rainbow & W. M. Sullivan (Eds.), Interpresive Social Science: A Reader (pp. 225-241). Berkley: University of California Press.
- Green, N. (2002). On the Move: Technology, Mobility, and the Mediation of Social Time and Space. *The Information Society*, 18(4), 281-292.
- Gretzel, U., Fesenmaier, D. R., Lee, Y.-J., & Tussyadiah, I. (2011). Narrating Travel Experiences: The role of new media. In R. Sharpley & P. Stone (Eds.), Tourist Experiences: Contemporary Perspectives(pp. 171-182). New York: Routledge.
- Gretzel, U., & Jamal, T. (2009). Conceptualizing the Creative Tourist Class: Technology, Mobility and Tourism Experiences. *Tourism Analysis*, 14, 471-481.
- Harrison, L. (2003). Attachment: Building secure relationships in early childhood. *Research in Practice Series*, *10*, 1–18.
- Hertlein, K. M. (2012). Digital dwelling: Technology in couple and family relationships. *Family Relations*, *61*, 374–387.
- Hertlein, K. M., & Blumer, M. L. C. (2013). *The couple and the family technology* framework: Intimate relationships in a digital age. New York, NY: Routledge.
- Hilbrecht, M., Shaw, S.M., Delamere, F. M., & Havitz, M. E. (2008). Experiences, Perspectives and Meanings of Family Vacations for Children. Leisure: *Journal of the Canadian Association for Leisure*, 32(2), 541.

- Hill, E. J., Hawkins, A. J., Ferris, M., & Weitzman, M. (2001). Finding an extra day a week: The positive influence of perceived job flexibility on work and family balance. *Family Relations*, *50*, 49–58.
- Hill, R. (1971). Modern systems theory and the family: A confrontation. Social Science Information, 10(5), 7-26.
- Johnsen, T. E. (2003). The social context of the mobile phone use of Norwegian teens. In J. Katz (Ed.), Machines that become us: The social context of communication technology, (pp. 161–170). New Brunswick, NJ: Transaction Publishers.
- Kandel, E. R. (1998). A new intellectual framework for psychiatry. *The American Journal of Psychiatry*, 155, 457–469.
- Katz, J. E. & Aakhus, M. (2003) Perpetual Contact: Mobile Communication, Private Talk, Public Performance. Cambridge, UK: Cambridge University Press, 2002
- Kilner, J. M., Friston, K.J., & Frith, C. D. (2007). Predictive coding: An account of the mirror neuron system. *Cognitive Processing*, *8*, 159–166.
- Kraut, R., Brynin, M., & Kiesler, S. (Eds.) (2006). *Computers, phones, and the Internet:*Domesticating information technology. New York, NY: Oxford University Press.
- Kross, E., Verduyn, P., Demiralp, E., Park, J., Lee, D. S., Lin, N., Ybarra O. Facebook use predicts declines in subjective well-being in young adults. *PloS One*, 8, e69841. doi:10.1371/journal.pone.0069841
- Lang, K. R., & Jarvenpaa, S. (2005). Managing the paradoxes of mobile technology. Information Systems Management, 22, 7–23.
- Licoppe, C. (2003). Two modes of maintaining interpersonal relations through telephone: From the domestic to the mobile phone. In J. Katz (Ed.), Machines that become us: The social context of communication technology, (pp. 171–186). New Brunswick, NJ: Transaction Publishers.
- Leggett, C. (2013, June 16). Couple relationships and technology use [Facebook page].

  Retrieved from https://www.facebook.com/CoupleRelationshipsAndTechnologyUse
- Mugenda, O. M and Mugenda, A. G. (2003). Research Methods: Quantitative and Qualitative Approaches. Acts Press, Nairobi
- Padilla-Walker, L. M., Coyne, S. M., & Fraser, A. M. (2012). Getting a High-Speed Family Connection: Associations Between Family Media Use and Family Connection. *Family Relations*, 61(3), 426-440.

- Popenoe, D. (2012). Disturbing the nest: Family Change and Decline in Modern Societies.

  New Brunswick, New Jersey: Transaction Publishers
- Selwyn, N. (2013). Education in a digital world: Global perspectives on technology and education. New York, NY: Routledge.
- Sheline, Y. I., Mittler, B. L., & Mintun, M. A. (2002). The hippocampus and depression [Supplemental material]. *European Psychiatry*, *17*, 300–305.
- Siegel, D. J. (2010). The mindful therapist: A clinician's guide to mindsight and neural integration. New York, NY: Norton.
- Spears, R., & Lea, M. (1994). Panacea or panopticon? The hidden power in computer-mediated communication. *Communication Research*, *21*, 427–459.
- Suomi, S. J. (1999). Attachment in rhesus monkeys. In J. Cassidy & P. R. Shaver (Eds.), Handbook of attachment: Theory, research, and clinical applications (pp. 181–197). New York, NY: Guilford.
- Trist, E. (1981). The Evolution of Socio-technical Systems, a conceptual framework and an action research program. In A. H. Van de Ven and W.F. Joyce (Eds), Perspectives on Organization Design and Behaviour (pp. 19-42). New York: John Wiley & Sons.
- Turkle, S. (2011). Alone Together: Why we experience more from technology and less from each other. New York: Basic Books.
- Valentine, G. (2006). Globalizing Intimacy: The Role of Information and Communication Technologies in Maintaining and Creating Relationships. Women's Studies Quarterly, 34(1/2), 365-393.
- Von Bertalanffy, L. (1968). General system theory: foundations, development, applications New York: Braziller.

**APPENDICES** 

**APPENDIX 1: INTRODUCTION LETTER** 

Dear Respondent,

**RE: TRANSMITTAL LETTER FOR RESEARCH INSTRUMENTS** 

I am currently taking a Masters of Arts degree in Project Planning and Management at the

university of Nairobi Embu campus. As part of the requirement for the award of the degree

for graduation, I am undertaking a research to examine influence of mobile phones usage on

spouse relationship a case of Tuungane Tujijenge Sacco Embu County, Kenya.

In this regard I am kindly requesting for your support in terms of time and by responding to

the attached questionnaire. Your accuracy and candid response will be appreciated

Please note that the information received will be treated with utmost confidence and you have

a choice of not writing your name. In addition, the findings of the study will solely be used

for academic research purposes and to enhance knowledge in the field of conservation

Thank you for your valuable time

Yours faithfully,

James Mureithi Njiru

L50/66284/2013

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### **APPENDIX 2: QUESTIONNAIRE FOR RESPONDENTS**

This Questionnaire is meant to collect data from the directors, staffs and members of Tuungane Tujijenge Sacco in Embu County. Any information provided in this questionnaire will be used for the purposes of research only and will not be divulged or availed to unauthorized persons.

Tick the correct answer in the boxes provided against the question where provided

You need not write your name on the questionnaire

5	1	F.	(	٦٦	Γ	T	N	1	V	Δ	٠.	1	R	H	1.5	3	P	C	)	١	11	n	I	N	IΊ	Γ,	S	1	n	I	7	V	T	n	1	7	R	2	١	P	F	n	(	7	7
Ι.	71	١,٦	•						•	$\overline{}$	٠.				11	7		•	,	٠,	•							, ,			' /	•			•		17		•				•		7

eas	e answer the questions as accurately as possi	ble	
E <b>C</b> T	ΓΙΟΝ A: RESPONDENT'S DEMOGRAP	HICS	
1.	Please indicate your village		
2.	Please indicate your sex		
	Female [ ]		
	Male [ ]		
3.	Please indicate your age groups position by	ticking (√	) in the appropriate box
	Less than 18 years		
	18-35 years		
	35-60 years		
	60-85 years		
	Over 85 years		
4.	Indicate the status of your position in the Sa	acco( <i>pleas</i>	e tick as appropriate)
	Ordinary member [ ]		
	Staff [ ]		
	Director [ ]		

Less than 6 years
6-10 years
11-15 years
16-20 years
Over 20 years
Level of education. Tick ( $\sqrt{\ }$ ) where appropriate
Primary level ( )
Secondary level ( )
Tertiary level ( )
University level ( )
None ( )
Marital status
Married ()
Single ()
Divorced ()
Widow ( )
Widower ( )
Kindly state your type of employment.
Government employment
Self-employment
Any other (specify)

#### SE

5. Please indicate in your opinion, your evaluation of each of the following indicators of mobile phone communication usage. Tick ( $\sqrt{}$ ) the correct answer in the space corresponding to the answer.

Scale: agree=0; Disagree=1;

	agree	Disagree
My communication on mobile phone negatively affects my relationship with my spouse.		
The messages received over the Mobile phones have led to suspicion relationship.		
Received calls by my spouse always interrupt our talk hence affecting our relationship.		
The use of unshared passwords and security codes by my spouse restricts open relationship and creates fear and insecurity.		
Any other (specify)		

#### **SECTION C: MOBILE MONEY TRANSACTIONS**

6. Please indicate in your opinion, your evaluation of each of the following indicators of mobile money transactions. Tick( $\sqrt{\phantom{0}}$ ) the correct answer in the space corresponding to the answer

Scale: agree=0; Disagree=1;

	agree	Disagree
Sending money to friends and other extended family members		
has created conflict within my spouse.		
Receiving money from external parties has always raise		
queries from my spouse		
Have you ever been a victim of fraud in mobile phone		
transactions (Yes or No). Mobile phone has affected family		
relationship with my spouse due to fraud case.		
The use of calling cards on phones has resulted to untimely		
budgets and unnecessary expenditures while distributing to		
friends.		

#### SECTION D: USE OF MOBILE PHONES APPLICATIONS.

7. Please indicate in your opinion, your evaluation of each of the following indicators of use of mobile phone applications. Tick  $(\sqrt{})$  the correct answer in the space corresponding to the answer.

Scale: agree=0; Disagree=1;

	Agree.	Disagree.
Always photos sent over the social network platforms by close		
friends create conflict with my spouse		
Involvement in social media highly affects my relationship with my spouse		
Use of mobile phones has made it possible to trace the well about of family members hence enhancing relationships.		
about of family members hence emiancing relationships.		
The use of phones has enhanced ways of relating with family members especially in distance places.		

#### **SECTION C: FAMILY RELATIONSHIPS**

8. Please indicate in your opinion, your evaluation of each of the following indicators of prevailing spouse relationship. Tick( $\sqrt{\phantom{0}}$ ) the correct answer in the space corresponding to the answer

Scale: agree=0; Disagree=1;

	Agree	Disagree
Communication with my spouse has improved with the		
introduction of mobile phones.		
Since I acquired a mobile phone, relationships with my spouse		
have improved than before.		
Addiction to phone usage has elicited enough complains from		
my spouse		
There is a very high chance of separation or divorce on the		
basis of mobile phone use.		
The use of social networks applications on phone internet has		
limited my time to be with my spouse.		
The tendency to buy new phones in the market has raised		
family conflict due to uncalled for expenditures.		

Thank you for participating.

#### APPENDIX 3. INTERVIEW SCHEDULE FOR SACCO GROUPS MEMBERS

#### INTRODUCTION.

All the items will be verbally transmitted to members of registered groups with the aim of gathering useful responses to be used in investigating influence of mobile phone usage on family relationships a case of Tuungane Tujijenge Sacco Embu County, Kenya.

Responses will be gathered from the sampled members

1. Gender:	_
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- 2. Do you own a mobile phone?
- 3. How often do you receive or send money to family members.
- 4. Has mobile phone usage raised any family problem? If so what problem.
- 5. Have you witnessed any case related to mobile phone fraud in your family? If so of what nature?
- 6. When do you use security codes and passwords in your phone?
- 7. How regular do you share your phone with the spouse?
- 8. Do you allow your spouse to access your phone any time?
- 9. Does your phone help to enhance relationship with family members and if so how?
- 10. Do you require privacy while handling your phone calls? if so why?
- 11. Have you ever lend friends/family members airtime or cash via mobile phone? If so did it affect in any way your future relationship?
- 12. Does phone use relate to your family expenditure trend? If so does it reduce or increase the expenditures.

#### **APPENDIX 4: OBSERVATION SCHEDULE**

- 1. Do members own phones?
- 2. Are there financial constrains associated with mobile phone?
- 3. What is the economic activity of the members?
- 4. What is the general trend of mobile replacement with regard to new innovation?
- 5. What is the common social practice of the phone?
- 6. Which members of the family own mobile phones?

APPENDIX 5. TABLE FOR DETERMINING SAMPLE SIZE FROM A GIVEN POPULATION.

N	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	346
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

Note: "N" is population size.

"S" is sample size.

Source: Krejcie et al, 1970