EMOTIONAL INTELLIGENCE, TRANSFORMATIONAL LEADERSHIP, AND KNOWLEDGE SHARING BEHAVIOUR AMONG ACADEMIC STAFF IN KENYAN UNIVERSITIES

BY

BIWOTT GEOFFREY

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DEDICATION

This thesis is dedicated to my beloved parents and the entire family for their support and guidance throughout this thesis.

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ABSTRACT

Knowledge sharing behavior has become increasingly important in recent years, and is recognized as a critical asset for universities particularly due to the growing complexity of dynamic leadership environments and the further advancement of regulatory frameworks for competitive advantage. Many studies on emotional intelligence and knowledge sharing behavior among academic staff have only focused on developed countries and less on developing nations. The aim of the study is to fill this gap by evaluating the moderating effect of transformational leadership on the relationship between emotional intelligence and knowledge sharing behavior in Kenyan universities. The specific objectives were to determine the effect of emotional self-awareness, self-regulation social skills, interpersonal relations and humility on knowledge sharing behavior in Kenyan universities and transformational leadership as a moderator in the relationship. The study was driven by social exchange theory, SECI Model and transformational leadership theory.Explanatory research design were adopted with a positivism approach. The target population comprised of 6423 and a sample of 376 academic staff drawn from fourteen chattered universities in Nairobi County Kenya main campuses only. The study used stratified technique to select the university's academic staff into 14 strata's representing each university in Nairobi County, Kenya the staff was selected using simple random sampling. Both descriptive and inferential statistics were used for analysis while hypotheses were tested using hierarchical regression. The regression results indicated that self-awareness ($\beta = 0.37$, $p<0.05$), Self-regulation ($\beta = 0.11$, $p<0.05$), Social skills ($\beta = 0.10$, $p<0.05$), Interpersonal skills ($\beta = 0.18$, $p<0.05$), and Humility ($\beta = 0.30$, $p<0.05$) has a positive and significant effect on knowledge sharing behaviour. The study further, established that transformational leadership positively moderates the relationships between self-awareness and knowledge sharing behavior ($\beta = 1.195$, $\rho<0.05$), self-regulation and knowledge sharing behavior ($\beta = 0.483$, $\rho<0.05$), social skills and knowledge sharing behavior ($\beta = 0.631$, $\rho<0.05$), interpersonal skills and knowledge sharing behavior ($\beta= 0.624$, $\rho<0.05$), and humility ($\beta = 0.01$, $\rho>0.05$) indicating that there is a positive and insignificant moderating effect of transformational leadership on the relationship between humility and knowledge sharing behavior. Similarly, the overall R and R^2 of the joint contribution of the predictor variables that explain knowledge sharing behavior are 81% and 66% respectively. The study concluded that high proportion of emotional intelligence results to improved employee knowledge sharing behavior crucial to transforming universities in Kenya and for knowledge sharing behavior to drive. In addition, this study recommends that it is imperative for the academic staff to have emotional intelligence in knowledge sharing behaviour so that they can identify areas of leadership in universities. Finally, Universities in Kenya are expected to train its employees on how to manage change from a transformative angle since it was evident that whenever academic staff had transformational leadership in the university, they would inspire and influence universities competitive advantage through knowledge and emotional intelligence.

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OPERATIONAL DEFINITION OF TERMS

Knowledge Sharing Behaviour: Knowledge sharing behavior, refers to a set of individual behaviors involving sharing and/or disseminating one's acquired "work-related knowledge and expertise with other members within" the university (Akhavan, & Abdali, 2012).

Emotional Intelligence: Emotional Intelligence is the capacity to reason about emotions, and of emotions to enhance thinking, it includes the abilities to accurately perceive emotions, to access and generate emotions so as to assist thought, to understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth (Mayer, & Caruso, 2014).

Social awareness: Possessing empathic traits which involve feeling compassion for others, but rather understanding their emotional makeup and treating them according to subsequent reactions. (Grieve et al., 2013)

Self- regulation: Self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal and institutional/ organizational goals Zimmerman (2005)

Interpersonal relations: Kind of relationship between a few groups of people; it includes ideas, expectation, awareness, and reaction of an individual to others. (Grieve et al., 2013)

Humility: Humility is the lack of feeling of superiority, arrogance, and haughtiness of a person towards other people. It is treating all people regardless of who they are, with respect, gentleness, kindness, and forgiveness. (Tangney, 2000).

Transformational leadership: Transformational leadership is a process in which leaders and followers help each other to advance to a higher level of morale and motivation (Bass 2008)

Positivism: Research philosophy emphasizing observation and operationalization of issues which should be measured (Erickson & Kovalainen, 2015).

Commission: Body mandated to oversee the functions for Higher Education established under universities Act, Universities Act, No. 42 of 2012

Commission for Higher Education: It is the Government agency mandated to regulate university education in Kenya. Universities Act, No. 42 of 2012

Accreditation: Its public acceptance and confirmation evidenced by award of a Charter, which a university meets and continues to meet the standards of academic excellence set by the Commission. Universities Act, No. 42 of 2012

Charter means a charter granted by the President universities Act, No. 42 of 2012

University is an institution of higher (or tertiary) education and research which awards academic degrees in various academic disciplines. Universities Act, No. 42 of 2012

Public University means a university maintained or assisted out of public funds Universities Act, No. 42 of 2012

Private University means a university established with funds other than public funds Universities Act, No. 42 of 2012

LIST OF ABBREVIATION AND ACRONYMS

CS	:	Communal sharing
EI	:	Emotional intelligence
KSB	:	Knowledge sharing behavior
LREB	:	Lake region economic block
RMT	:	Relational models theory
SET	:	Social exchange theory
TL	:	Transformational leadership
TPB	:	Theory of planned behavior

CHAPTER ONE

INTRODUCTION

1.0 Overview

This chapter presents the background to the study, statement of the problem, study objectives hypotheses, the significance of the study and the scope of the study

1.1 Background to the Study

Knowledge sharing is recognized as a vital tool in the modern knowledge economy for companies to achieve sustainable long-term success. (Martin-de-Castro, 2017) Information exchange can be considered one of the most critical knowledge information management mechanisms in organizations (Wang & Hou, 2015). As such, strategies to enable and empower individuals and groups to enhance information sharing practices and actions in organizational environments should be put in place. Knowledge exchange is a critical mechanism for turning individual information into organizational knowledge (Foss *et al.,* 2016). When people are not willing to share what they learn, it would be impossible to implement knowledge sharing. Knowledge sharing is crucial for organizational outcomes (Foss *et al.,* 2010). Knowledge sharing, for example, could enable individuals to jointly create new knowledge that goes beyond what one owns (Van den Hooff and Hendrix, 2014), Knowledge sharing could also lead to a large individual problem-solving ability that is operational to the organizational level of problem-solving capacity (Nickerson and Zenger 2014). Organizations that plan to implement knowledge management programs will enable workers to increase their willingness to share knowledge for organizational use (Marshall and Sapsed, 2017).

In the context of higher education, universities are considered knowledge-based organizations because of their position as the epitome of information creation and sharing. A clear example would be the sharing of knowledge among academic staff, which would enhance the capacity and quality of research undertaken by universities. It is a practice and a tradition in an academic institution that senior academic staff exchange experience and skills with junior academics in order to improve symbiotic learning and teaching processes (Goh and Sandhu, 2013). Knowledge sharing is thus one such phenomenon that can be clarified by looking at how it affects behavior (Elogie, 2010).

Nonetheless, a review of the literature on the actions of individuals sharing knowledge indicates that the motives and factors involved in behavior, such as knowledge sharing, are still considered to be difficult to understand in depth and to analyze in detail (Holste & Hou, 2015). It is therefore important to understand what inspires individuals to share their knowledge and what prevents them from sharing it. Emotional intelligence can be one of the variables that can play an important role in influencing their knowledge sharing efforts. Emotional Intelligence (EI) has garnered a lot of research interest from practitioners and academics alike over the past two decades and has become one of the widely discussed academic research subjects in the fields of psychology, education and management (Pradhan & Nath, 2012). Emotional intelligence is known to be one of the most expedient individual differences in organizational research (Brackett *et al.*, 2013).

According to Benson (2010), emotional intelligence encompasses the process of handling personal social and environmental changes by dealing with situations, solving problems and making decisions quickly and realistically. It is a collection of

skills relevant to emotional processing and emotional information (Cote *et al.*, 2010). Gulluce and Iscan (2010) define emotional intelligence as a mixture of desires, motives and real values to control behaviors of individuals that are related to human relationships and evaluate success in the workplace. Grace (2012) found that emotional intelligence and skills are important to performance. Chopra and Kanji (2010) also suggest that emotional intelligence can help manage relationships, perceive feelings, inspire and lead others. Luu (2013) notes that emotional intelligence can trigger behavior and function as a layer between cognition and actions.

high level of emotional intelligence can help not only to control our own emotions, but also to handle the emotions of others. This argument is strongly supported if another person reacts with selfishness or ignorance to shared knowledge or if he or she has too little self-efficacy to learn from others (Van der Hoof *et al.*, 2012). Darabi (2012) suggests that emotional intelligence is one of the most important human mechanisms of adaptation to the environment. Chin (2013) has described emotional intelligence as a method used by workers to identify all worker-related emotions, as well as emotional self-management, motivation and social skills. Petrides (2009) identified 15 components of emotional intelligence and categorized them into four factors: emotionality, self-control, sociability, and well-being. Emotional Intelligence appropriate intervention programs can inculcate a combination of dynamic skills required for the same reason. Emotional intelligence thus becomes a crucial factor to be considered in the company (Antony, 2013).

Given that knowledge sharing consists of social interactions among employees (Chow *et al.,* 2018) and that such experiences are affected by relationships among individuals

(Nahapiet *et al.,* 2018), it is understood that employee emotional intelligence plays a key role in influencing their knowledge sharing intentions (Chang *et al.,* 2011). When knowledge owners have high emotional intelligence, they can control their own emotions and understand other people's emotions and shift the owner's habit, and it will be easy to trigger knowledge sharing. Transformational Leadership (TL) is a leadership style that refers to the process of building loyalty to the goals of the organization and inspiring followers to participate (Gurbuz, *et al.,* 2012).The influence of leadership is a key factor in the success of any company that pursues these objectives. (Johnson, 2017) Explains how transformational leadership theories emerge from the researcher's analysis of the emotional and denotative dimensions of leadership effect.

According to Burke and Collins (2001), transformational leaders achieve these outcomes in one or more of the following ways, which represent one of the four interrelated elements of Transformational Leadership: Idealized influence which is a behavior which stimulates intense follower emotions and engagement with the leader; Intellectual Stimulation which is a behavior that enhances pro-knowledge; Individualized consideration which includes the provision of resources, encouragement and coaching to followers; and finally Inspirational inspiration which involves the presentation of appealing vision, the use of signs to concentrate subordinate attention, and the reinforcement of positive behaviour.

Studies were conducted to explore the connection between emotional intelligence and transformational leadership. Palmer, (2013), has identified important associations between the components of transformational leadership (idealized influence, inspirational motivation, and individualized leadership) and emotional intelligence

subscales. In addition, the findings of the study (Gardner and Stough 2012) suggested that emotional intelligence was strongly correlated with all components of transformational leadership, with the components of knowing emotions (external) and emotional control being the best predictors of this type of leadership style.

In the context of higher education, universities are considered as knowledge-based organizations due to their role as the epitome of knowledge development and management. As a growing phenomenon, KSB requires Emotional intelligence to exploit on the gains and assist thought, to understand emotions and emotional knowledge, and reflectively regulate emotions so as to promote emotional and intellectual growth (Mayer, & Caruso, 2014). Recent scholars have considered Knowledge sharing as one of the most important knowledge management processes in organizations (Wang & Hou, 2015). Although KSB is a critical asset, studies have focused on how EI and KSB influence each other, to the exclusion of the role leadership plays as a moderator. (Cheng et al., 2014).

Hence, the need to examine how investigating knowledge sharing behavior of academic staff at higher education especially in Kenya, should be enhanced since recent studies have realized that human knowledge is doubling every 13 months on average (Schilling, 2013) definitely calling for developing knowledge sharing strategies in higher education institution. Thus, the need to study and examine the moderating role of Transformational Leadership on the link between Knowledge Sharing Behaviour and Emotional Intelligence.

1.1.1 Knowledge Sharing Behavior in Higher Education

Universities are knowledge-intensive environments and are responsible for creating, managing, and disseminating knowledge in society. They are knowledge centers established to generate and provide knowledge, and to equip people with the best education in order to serve their societies. They grow and prosper from the knowledge of their academics, staff, and students (Singer & Hurley, 2005). Accordingly to ensure success, achieve their goals (Sharma, 2010), and have constant performance improvements, universities should promote knowledge sharing among their academics. In today's knowledge-based age, the importance of education is increasingly advancing due to science and technology, spreading information and knowledge, and promoting literacy. During the 19th and 20th centuries, the development of education was a critical driver for building societies (Mazzarol & Soutar, 2002).

Meanwhile in the twenty first century, the role of education became critical for the development of knowledge-based societies, where individuals are responsible for their own development (Sallis & Jones, 2002). Such development will only be accomplished with the sharing of individuals' knowledge. However, research-based knowledge has not been very successful in guiding decision makers in universities to value their capital assets and to manage and utilize the knowledge of these assets (Gera, 2012). Moreover, while there are broad researches about knowledge management and its processes in different areas, research about knowledge sharing in higher education is scarce (Fullwood *et al.,* 2013). Knowledge sharing is an essential concept in universities (Sohail & Daud, 2009), where knowledge creation, management, sharing, and utilization is implanted (Cheng, Hu & Lau, 2009).

Ramayah *et al.,* (2013) acknowledges the Platforms of sharing Knowledge in institutions of higher learning includes knowledge contribution through written documentation such as thesis, projects, scholarly articles and books or sharing knowledge across groups of people through class discussions and group works. Mahmud and Bretag (2013) acknowledges little existence of research focusing on academic integrity among academic staff and postgraduate students, hence the keen interest by the researcher to investigate the issue at hand by identifying various factors affecting academic knowledge sharing and further suggest possible strategies to promote academic knowledge sharing behavior.

According to Cheng *et al.,* (2009), the impact of knowledge sharing in higher education institutions could be larger than that created by business organizations. They further indicate that implementing knowledge sharing properly and wisely can create a competitive advantage for all kinds of higher education institutions. In academic environment, the role of knowledge sharing is quite significant to achieve maximum results (Babalhavaeji & Kermani, 2011) considering the important role of academics in education, research, and scholarly work. The process of knowledge sharing is gaining more attention by many researchers because knowledge sharing is relevant to the critical role of higher education institutions where knowledge is being created (Kermani *et al.*, 2011).

According to Sallis and Jones (2006), academics are expert knowledge workers engaged in teaching, writing, and research, and their academic institutions generate value using their intellectual assets. For academics in particular, to share knowledge is part of their daily job and work activities. They create, manage, disseminate, and share knowledge with each other and with students (Sohail & Daud, 2009). Moreover,

the knowledge created, stored, and shared serve as repository knowledge for academics, researchers, and students to distinguish the academic institution and to enhance their own knowledge and help them advance in their careers (Basu & Sengupta, 2007).

Therefore, realizing the importance of knowledge sharing for academics in terms of promoting their learning and innovation (Reige, 2005) will certainly encourage them to practice it. Despite the increasing awareness during the last few years of knowledge sharing benefits and the growing number of organizations adopting its strategies, almost none are in the higher education sector (Sallis & Jones, 2002; Metcalf, 2006). There is a huge need for knowledge sharing in higher education as much as it is in business. If excellent achievements are achieved in one area of a university, there would be a process for knowing how they were achieved and there would be strategies to replicate them elsewhere. Realizing that human knowledge is doubling every 13 months on average (Schilling, 2013) definitely calls for developing knowledge sharing strategies in higher education institution.

1.2 Statement of the Problem

The primary role of universities is imparting knowledge (Ahmadi and Ahmadi 2012). According to Sallis and Jones (2006), academics are expert knowledge workers engaged in teaching, writing, and research, and their academic institutions generate value using their intellectual assets. For academics in particular, to share knowledge is part of their daily job and work activities. They create, manage, disseminate, and share knowledge with each other and with students (Sohail & Daud, 2009). Moreover, the knowledge created, stored, and shared serve as repository knowledge for academics, researchers, and students to distinguish the academic institution and to

enhance their own knowledge and help them advance in their careers (Basu & Sengupta, 2007).

From the foregoing explanations there is little doubt that in universities knowledge-intensive workers engaged in teaching, writing, and research and their higher education institutions generate value using their intellectual assets and to share knowledge is part of their daily jobs and work activities. They create, manage disseminate and share knowledge with each other and with students. Therefore realizing the importance of knowledge sharing for academicians in promoting their learning and innovation would encourage them to practice it. Reige, (2005).

In the last four decades, there has been a rapid growth of the higher education sector as a whole. Demand for higher education in Kenya has attracted various universities, both public and private to open up campuses. This has been done to serve the numerous numbers of students enrolling for higher education institutions (CHE, 2018).The current state of the universities consists part of the inherited legacies from the past and policy intentions of the future.

There is a consensus that Knowledge sharing behavior has generated heightened interest in literature in the recent past because of its importance in enhancing and imparting knowledge (Ahmadi and Ahmadi 2012). However, Barriers and problems for knowledge sharing organizations are inevitable (Riege, 2015). A survey by Commission for University education (2018), found that the level of knowledge sharing among members of the respective organizations, including the academic staff was underscored (Mukhwana *et al*, 2018).

Despite the increasing awareness during the last few years of knowledge sharing benefits and the growing number of organizations adopting its strategies, almost none are in the higher education sector (Sallis & Jones, 2002; Metcalf, 2006). There is a huge need for knowledge sharing in higher education as much as it is in business. If excellent achievements are achieved in one area of a university, there would be a process for knowing how they were achieved and there would be strategies to replicate them elsewhere.

Regrettably, even though universities are knowledge service providers, many Kenyan universities were not utilizing knowledge to the fullest to improve their performance. This is because the data, information, and knowledge available in these universities are not appropriately managed when they could be efficiently shared and reused to generate new knowledge (Wambui, 2017).

According to (Cheng *et al.,* 2014), agrees that more empirical research investigating knowledge sharing behavior of academic staff at higher education (Cheng *et al.*, 2014), especially in Kenya, should be enhanced since recent studies have shown that emotional intelligence has an influence on transformational leadership. Although, there has been widespread uncertainty about the link between emotional intelligence and transformational leadership outcomes and many have failed to find notable relationships between emotional intelligence, knowledge sharing behavior and transformational leadership in particular.

Nevertheless, knowledge sharing processes are not integrated into the daily routines of faculty and staff, and there is a huge duplication of effort. The ranking in (Cheng *et*

al., 2014), study shows a focus on meeting the individual knowledge content needs of end users by focusing on libraries, technology, research, and teaching excellence. In the light of the above, it's therefore, critical to focus and understand emotional intelligence, transformational leadership, and knowledge sharing behavior among academic staff in Kenyan universities in order to unearth the problem given the fact that human knowledge is doubling every 13 months on average (Schilling, 2013) definitely calling for developing knowledge sharing strategies in higher education institution.

1.3 General Objective of the Study

The study aimed at establishing the moderating role of transformational leadership on the relationship between emotional intelligence and knowledge sharing behavior in Kenyan universities.

1.3.1 Specific Objectives

The specific objectives were to;

1) To determine the effect of emotional self-awareness on knowledge sharing behavior in Kenyan universities
2) To establish the effect of self-regulation on knowledge sharing behavior in Kenyan universities
3) To assess the effect of social skills on knowledge sharing behavior in Kenyan universities
4) To analyze the effect of interpersonal relations on knowledge sharing behavior in Kenyan universities

5) To investigate the effect of humility on knowledge sharing behavior in Kenyan universities

6 a) To determine the effect of moderating role of transformational leadership on the relationship between emotional self-awareness and knowledge sharing behavior in Kenyan universities

6 b) To establish the effect of moderating role of transformational leadership on the relationship between self-regulation and knowledge sharing behavior in Kenyan universities

6 c) To assess the effect of moderating role of transformational leadership on the relationship between social skills and knowledge sharing behavior in Kenyan universities

6 d) To analyze the effect of moderating role of transformational leadership on the relationship between interpersonal relations and knowledge sharing behavior in Kenyan universities

6 e) To investigate the effect of the moderating role of transformational leadership on the relationship between humility and knowledge sharing behavior in Kenyan universities

1.4 Hypotheses of the Study

$H_{O1:}$ There is no significant effect of emotional self-awareness on knowledge sharing behavior in Kenyan universities

$H_{O2:}$ There is no significant effect of self-regulation on knowledge sharing behavior in Kenyan universities

$H_{O3:}$ There is no significant effect of social skills on knowledge sharing behavior in Kenyan universities

$H_{O4:}$ There is no significant effect of interpersonal relations on knowledge sharing behavior in Kenyan universities

$H_{O5:}$ There is no significant effect of humility on knowledge sharing behavior in Kenyan universities

$H_{O6a:}$ There is no significant effect of the moderating role of transformational leadership on the relationship between self-awareness and knowledge sharing behavior in Kenyan universities

$H_{O6b:}$ There is no significant effect of the moderating role of transformational leadership on the relationship between emotional self-regulation and knowledge sharing behavior in Kenyan universities

$H_{O6c:}$ There is no significant effect of the moderating role of transformational leadership on the relationship between social skills and knowledge sharing behavior in Kenyan universities

$H_{O6d:}$ There is no significant effect of the moderating role of transformational leadership on the relationship between interpersonal relations and knowledge sharing behavior in Kenyan universities

$H_{O6e:}$ There is no significant effect of the moderating role of transformational leadership on the relationship between humility and knowledge sharing behavior in Kenyan universities

1.5 Significance of the Study

This study provides empirical support for moderating effect of transformational leadership on the relationship between emotional intelligence and knowledge sharing behaviour among academic staff in universities in Kenya. It therefore enables them adopt appropriate strategies in their universities that are in line with enhanced university competitiveness in the form of enhanced knowledge sharing behaviour.

To scholars and professionals, the study will benefit them since it acts as a source of literature and new knowledge and insight on the importance of emotional intelligence and knowledge sharing behaviour. It also add to the body of knowledge as the results support the theories of social exchange, SECI models theory, theory of planned behaviour and transformational leadership.

Theoretically, the study contributes and extends earlier research on knowledge sharing in universities in Kenya. In empirical terms, the study will help Kenyan universities management understand the importance of emotional intelligence for effective knowledge sharing and the need to foster knowledge sharing behavior.

The findings of this study also is significant to decision-makers, researchers, stakeholders and policy makers in understanding the important role played by emotional intelligence and transformational leadership in improving knowledge sharing behavior in order to cultivate, nurture and facilitate their formation. The findings shall also serve as a benchmark for universities that have not effectively addressed strategic knowledge sharing behavior, especially in Kenyan Universities, by providing a significant contribution.

1.6 Scope of the Study

The study focused on the moderating role of transformational leadership on the relationship between emotional intelligence and knowledge sharing behavior in Kenyan universities. The study targeted academic staff from fourteen chartered universities in Kenya in Nairobi County. This is because the academic staff in universities are knowledge intensive employees who will eventually transform their universities through emotional intelligence of shared knowledge for competitive advantage of their institutions. The study was limited only to five constructs of emotional intelligence which include self-awareness, self-regulation, social skills, interpersonal relations, and humility. The study was carried out for a period of 3 months from May-July 2019.

CHAPTER TWO

LITERATURE REVIEW

2.0 Overview

This chapter focuses on the concepts related to emotional intelligence, transformational leadership, and knowledge sharing behavior. It also gives details on the theoretical and conceptual framework, review of variables and empirical literature, research gaps and summary of literature review.

2.1 Concept of Knowledge Sharing Behaviour

Knowledge sharing behavior refers to a set of individual behaviors involving sharing and/or disseminating one's acquired "work-related knowledge and expertise with other members within" the university (Ghojavand & Abdali, 2012). Knowledge sharing behaviour is defined as a behavior displayed by group members in learning environments for receiving and giving resources, knowledge, experience, or emotional support to/from other members (Bock *et al.,* (2005). Knowledge sharing behaviour emerges with the expectation of external rewards and reciprocal relations (Bock *et al.,* 2005). Knowledge sharing is steady and smooth when group members believe that sharing yields a reciprocal benefit, or the maintenance of reciprocal relations contributes to their work. Group members are generally interested in knowledge sharing to acquire new information, access more useful sources, increase interpersonal communication, enhance both working performance and problem-solving skills, and support professional skills (Tseng & Kuo, 2014). Group members particularly expect to benefit from the sharing process (Watson & Hewett, 2006).

Knowledge sharing activities are divided into two categories Ridings *et al.*, (2002): knowledge receiving and knowledge giving. Knowledge receiving, in its simplest definition, refers to reading message threads and conversations in a learning environment. In addition, knowledge is actively demanded by the sending of questions and suggestions. On the other hand, knowledge giving environment involves initiating a new subject, sending a message, responding to another person's message directly, or just sending comments. Therefore, knowledge giving mostly involves active participation and exposure. Knowledge sharing practice is quite significant for individuals seeking to improve their performance and career as well as for organizations aiming to achieve their success and longevity. Knowledge sharing practice is manifested in the social interaction among individuals to exchange information, knowledge, experiences, skills, concepts, thoughts, opinions, insights, ideas (Durmusoglu *et al.,* 2014).

Literature, such as Bartol and Srivastava (2002), suggests that Knowledge Sharing Behaviour has four major components by which individuals share their knowledge within an organization, which include, the contribution of knowledge to organizational databases; sharing knowledge in formal interactions within or across teams or work units; thirdly, sharing knowledge in informal interactions among individuals; and fourthly sharing knowledge within communities of practice, which are voluntary forums of employees in an organization. Practicing knowledge sharing involves using appropriate activities and tools (Alajmi *et al.,* 2010) that facilitate exchanging, transferring, and utilizing knowledge. Several researchers and practitioners have identified a list of the most popular activities and tools widely employed by many organizations (Ahmad & Daghfous, 2010).

The activities include team meetings, discussions, training programs, mentorships, conferences, brainstorming sessions, peer coaching, focus groups, and seminars, while the tools include artifacts, educational materials, manuals, boards, procedures, databases, decision-support systems, portals, and online communication channels like emails, internet, and intranet. To be able to stimulate Knowledge sharing, organizations need to understand how knowledge is shared between employees (Coradi *et al.*, 2015) and thus how to measure behavior that ensures that knowledge is shared. With regard to the cognitive element of the process, involvement is mentioned as an important aspect (Hau *et al.*, 2016).

Berends (2005) identified ways through which specific employee activities of Knowledge sharing takes place. He identified a taxonomy of 29 "moves" (a basic unit of communication in which knowledge is shared in a certain way), which he grouped into 5 categories of Knowledge sharing activities: Descriptions (of others, own activities, knowledge, problem, findings, earlier interaction, etc.); they aim at providing an adequate representation of one's believed reality to the other during the meeting. Actions (showing something, handing over a publication, calculating or trying, etc.); they also consist of non-linguistic elements and are situated in a material environment.

Questions (asking a question, questioning, asking for help); they are an important element of interactions, Proposals/suggestions (hypothesizing, warning, instructing, etc.); they differ in two important respects from descriptions as they (a) are not necessarily claimed as valid/effective and (b) include an appeal to follow or explore an option. Evaluations (giving arguments, agreeing, rejecting, and concluding); they consist of reactions on earlier moves. Besides the further development of one's

knowledge, these categories of Knowledge sharing moves have the potential to support the performance of research work through a contribution to the solution of a problem, a change in the problems a researcher is working on, and/or being activated to undertake new actions (Berends, 2005).

Knowledge sharing behavior is a systematic activity in order to transfer and exchange knowledge and experiences among a group or an organization with a common goal (Salovey & Mayer, 1989). Knowledge sharing is a mutual course of knowledge generation (Van den Hooff & Ridder, 2004). Cummings (2004) defined Knowledge sharing as a means by which an organization gains the access to realize its inside and outside knowledge by the mode of exchanging. It assists the synergy of people who work in the direction of common aims (Boland & Tenkasi, 1995). This process is essential to change entity knowledge to organizational knowledge as knowledge exists only in the brains of people (Beveren, 2002).

Knowledge sharing is a kind of communiqué process by which numerous parties are implicated in know- ledge reassign, and its output is a fresh knowledge generation (Usoro *et al.*, 2007). Knowledge complicated model has multiple meanings and labelling. Knowledge is valid and confirmed information owned by organizational heads in decision-making and actions to achieve success and competitive benefit that includes principles, ideas, skills, roles and trends that may help in decision-making. Knowledge can be shared and transferred between the right people and at the right time, which could increase organization's prospects to advance the performance (O'Dell & Grayson, 1999).

Knowledge and information can be used interchangeably, for example, Zander and Kogut (1995) have noted that information and knowledge can be

transferred without losing its cohesion. Nonaka, (1994) declares that information and knowledge are analogous in many cases; even they have differences in many aspects. Information is real, whereas knowledge is on commitments and viewpoints. Knowledge sharing involves sharing the appropriate information, suggestions, thoughts and expertise with the remaining people in the organization. Similarly, it is a set of conducts that involves the swap over of information or serving others. Some even consider it as core competence and performance driver of the firms (Yesil *et al.,* 2013) It is becoming increasingly recognized, however, that only a subset of the actual knowledge residing somewhere within business organizations is of strategic significance.

Creating and sharing knowledge that is actually relevant to strategic decision making (as opposed to merely day-to-day operations) poses a nontrivial challenge. This inheres in the limited amount of time and mental capacity that organizational members have to process new information and knowledge (Kasper *et al.,* 2013) Knowledge sharing is considered to be one of most important aspect of knowledge management (Gupta *et al.,* 2000) and the success of knowledge management initiatives depends on knowledge sharing (Wang *et al.,* 2010). Research on knowledge management argues that organizational knowledge at collective level, and individual learning arise from communication, exchange and sharing between colleagues. Employees contribute to both their own and the organization's knowledge accumulation by reaching for new knowledge and producing knowledge during their activities. Transferring of knowledge, knowledge sharing has its own place and importance in knowledge management. (Özler, *et al.,* 2006). Knowledge sharing is the provision of task information and know-how to help others and to collaborate with

others to solve problems, develop new ideas, or implement policies or procedures (Cummings, 2004).

Knowledge sharing can occur via written correspondence or face-to-face communications through networking with other experts, or documenting, organizing and capturing knowledge for others. Although the term knowledge sharing is generally used more often than information sharing, researchers tend to use the term "information sharing" to refer to sharing with others that occurs in experimental studies in which participants are given lists of information, manuals, or programs. (Wang, *et al.,* 2010) Knowledge-sharing activities will provide the members of any group with opportunities to exchange ideas and take part in cooperative activities, so that the effectiveness of members' performance in contributing to the success of their organization will be maximized. (Ghorbani,, 2013).The knowledge sharing definition was narrowed down by knowledge management concept as the process that mainly is a capturing process of firm and person expertise while it distribute and reside it to the place that it can assist to produce the hugest returns for the firm and people as well. (Krogh, 2000) Sharing knowledge is not just an exchange of information that can impact the working relations, power distribution, and influential patterns and also changing the way people describe their duties and responsibilities (Momeni *et al.,* 2013).

Knowledge is assumed as a production resource part that should be shared, improved and also applied for providing good ideas for a defined challenge or issue since Knowledge sharing is the exchange of knowledge between two individuals: one who communicates knowledge and one who assimilates it. In knowledge sharing, the focus is on human capital and the interaction of individuals. Strictly speaking, knowledge

can never be shared. Because it exists in a context; the receiver interprets it in the light of his or her own background. (Paulin *et al.,* 2012).

Knowledge sharing is thought as a social behavior and many physical, technological, psychological, cultural and personal factors have effective roles in not only supporting but also limiting knowledge sharing. Despite many advantages of knowledge sharing, researchers and implementers often argue that in many cases, in fact, individuals abstain from sharing their knowledge with others (Davenport, 2008). Moreover, they say that act of sharing knowledge is unnatural and there are many reasons for people to abstain from sharing their knowledge with others. Some of what obstruct sharing knowledge between colleagues are: the relations between the source of knowledge and the receiver of the knowledge aren't extensive, according to Smith and McKeen (2003) rewards and motivation aren't enough for sharing, according to Ikhsan and Ronald (2004) time is insufficient, and knowledge sharing culture is lacking. Furthermore, inadequacy in understanding what to share with whom, limited appreciation of sharing knowledge and fear of acquiring false knowledge may also hinder knowledge sharing acts (Majid *et al.,* 2009). Knowledge sharing process is conceptualized as two dimensions namely knowledge donating and knowledge collecting (Van Den Hooff *et al.,* 2004).

Knowledge donating is a process of individuals communicating their personal intellectual capital to others, while knowledge collecting is a process of consulting colleagues to encourage them to share their intellectual capital. (Lin *et al.,* 2007). States that knowledge sharing is the process through which one unit (e.g. individual, team, and department) is affected by the experience of another (Argote, *et al.,* 2000).

It is a process by which knowledge held by individuals is converted into a form that can be understood, absorbed, and used by other individuals. (Bouma, 2011).

Gupta and Govindarajan (2000) state that knowledge sharing can be conceptualized in terms of five elements: (1) perceived value of the source's knowledge, (2) willingness of the source to share knowledge, (3) existence and richness of transmission channels, (4) willingness of receiver to acquire knowledge from the source, and (5) the absorptive capacity of the receiver. This research looks particularly at the second aspect and tries to understand the relation between emotional intelligence as a source intention to share its knowledge. Nonaka and Takeuchi (1995) describe how firms create and share new knowledge through four primary modes that involve the interaction of tacit and explicit knowledge: Socialization is the process of sharing one's experience with another, thereby creating tacit knowledge in the form of mental models and technical skills. Tacit knowledge is shared among people through modelling and mentoring, conversation, workplace culture, and shared experiences. Externalization converts tacit knowledge into explicit concepts. Firms do this by using metaphors, analogies, concepts or models. Knowledge created in formal educational settings such as in universities and in masters programs fits in this category. Externalization is a process among individuals within a group (Nezafati *et al.,* 2009).

Internalization involves turning explicit knowledge into tacit knowledge. Knowledge that has been generated by others is absorbed by another individual and internalized. Experiences through socialization, externalization and combination are internalized into individual tacit knowledge bases in the form of shared mental models or technical know-how. The internalisalization process transfers organization and group explicit knowledge across organizations (Nezafati *et al,* 2009).

2.1.1 Difference between the concepts of Data, Information and Knowledge

Data, information and knowledge concepts are three principles interrelated and can be organized on a single spectrum depending on the extent to which they represent human involvement and the system of nature at hand (Tsoukas and Vladimirou, 2001). It means that data require minimal human judgment, while awareness requires total judgment. Judgment derives from a self-conscious desire to reorder, rearrange or reinvent what is known and thus create new points of view and new knowledge for a specific purpose (Pham, 2008). The generally accepted view views data as perhaps a line of numbers, while information is data in context; knowledge is information that is collected and structured in a meaningful way (Zack, 1999). In this regard, Wallace (2007) referred to data as facts about the state of the world, to information as data that are endowed with meaning and purpose, and to knowledge as information that is connected to relationships.

Data refer to the events that people notice, while information provides meaning by evaluating data in an interpretive framework. Knowledge involves the experience that enables people through available data and information to be aware of some things, to know how to do things or to cause things to happen. Knowledge makes both data and information manageable (Hicks *et al.*, 2007). Therefore, Davenport and Prusak (1998) defined knowledge as "a fluid mix of framed experience, values, contextual information, expert insight and grounded intuition that provides an environment and framework for evaluating and incorporating new experiences and information". In this sense, the distinction between data, information and knowledge in business is also often made. Sanchez (2003) stated that data are regarded as representations of events that people notice and bring to the attention of other people in the organization, and

information is the meaning that is imputed to those data. Meaning is driven through comparison of data, and knowledge is a set of beliefs about causal relationships in an organization. In organizations, knowledge often becomes embedded not only in documents and repositories but also in organizational routines, processes, practices and norms (Wallace, 2007).

Thus Tian *et al.*, (2009) and Tuomi (1999) suggest that the hierarchy from data to information to knowledge could also form a spiral/cyclic mode. They argue that when knowledge is articulated, verbalized and structured, it becomes information which, when assigned a fixed representation and standard interpretation, becomes data. Similarly, Alavi and Leidner (2001) suggest that information is converted to knowledge once it is processed in the mindsof individuals, and knowledge becomes information once it is articulated and presented in the form of texts, graphics, or other symbolic forms.

2.2 Concept of Emotional Intelligence

Emotional Intelligence is the capacity to reason about emotions, and of emotions to enhance thinking which includes the abilities to accurately perceive emotions, access and generate emotions so as to assist thought, understand emotions and emotional knowledge, and to reflectively regulate emotions so as to promote emotional and intellectual growth (Mayer *et al.*, 2014). Emotional Intelligence is a field of cognitive ability involving social skills and traits both of which aid in the facilitation of interpersonal behavior (Suleiman and AlShaikh, 2007). Emotional intelligence is a key competency in successful organizational performance. Emotional Intelligence is gradually being applied in selecting who will be hired, dismissed, retained or promoted (Singh, 2011).

Emotional intelligence means becoming aware of one's emotions and dominating it. This intelligence is a form of social intelligence that involves the capability of understanding others' feeling, recognizing and using it for thinking to influence others. Goleman (1999) believed that emotional behaviors are some skills in which the owner can control his/her emotions with self-awareness and improve it through his/her own management. In addition, an individual can understand its impact through empathy and enhance his/her or others' mood by managing the relationship. Goleman and Cherniss (2001), stated that emotional intelligence includes the individual and community capability and its constituent components includes self-awareness, social skills, coping with pressure, adaptability and overall creation.

Emotional intelligence was originally conceptualized by Salovey and Mayer (1990) whereby they defined emotional intelligence as the ability of an individual to monitor one's own and others emotions, to discriminate among the positive and negative effects of emotion and to use emotional information to guide one's thinking and actions. (Dissanayaka, *et al.,* 2010).Emotional intelligence theory has evolved from definitions of intelligence as one of the most important mechanisms of human that involves the ability to adapt to the environment. (Darabi, 2012).

Managers with high emotional intelligence are able to assist the staff to overcome the possible consequences of stress (Goleman, 2006). Managing of emotions in self and influencing those of others is an important part of emotional intelligence. It entails influencing others, and effectively communicating with them (Mathews *et al.* 2004). Managers with high emotional intelligence attain high levels of innovation and management of conflict (Goleman, 2010). The emotional state of leaders can either facilitate or impair staff work performance.

The foregoing definition suggests that Emotional intelligence plays a critical role in effectively managing one's relationship with others. Highly effective leaders possess high emotional intelligence. Emotional intelligence is the outcome of leadership. Without it, a well-trained, incisive and analytical person cannot make a good leader (Mayer, *et.al* 2010). High emotional awareness and regulations of emotions have been considered to be important for the institutions (Allen, 2013). Research done has shown that emotional intelligence is a significant predictor of key institutional concerns such as work performance and efficient team leadership.

Brown *et.al* (2003) contends that Emotional Intelligence motivates people to act, control action and are also seen to play a role in staff career development. Negative experiences lead to negative effects while positive effects ensure higher levels of energy enthusiasm, alertness, and resourcefulness for sustaining the performance necessary for survival Watson, (2000). In the realm of personality styles, managers should recognize that people are different. Different people are considered to be difficult because managers have not learned to work effectively with these differences. All personality styles add to team strength when one focuses on strengths rather than weaknesses Stock, (2000). Goleman (2010) found out that two-thirds of the work-related competencies that he identified were emotional by nature.

Emotional Intelligence can help in tracking the attitudes and opinions of staffs which help in identifying problems and providing solutions, related to management, training and professional development (Harvey, 2009). An emotionally intelligent leader is able to tell how much important an issue is over another so that he can prioritize on the important issues.

Luu (2013), states that emotional intelligence can activate behavior and acts as a layer between cognition and behavior. It has to be seen that high emotional intelligence level can help not only to manage our own emotions but also to manage the emotions of others. Darabi (2012) argues that emotional intelligence is one of the most important human mechanisms that involve the ability to adapt to the environment. Chin (2013) has determined emotional intelligence as a tool that employees use to detect all worker related emotions, and also for emotional self-management, motivation and social skills.

Managers with high emotional intelligence attain high levels of innovation and management of conflict (Goleman, 2010). The emotional state of leaders can either facilitate or impair staff work performance. The foregoing definition suggests that Emotional intelligence plays a critical role in effectively managing one's relationship with others. Highly effective leaders possess high emotional intelligence. Emotional intelligence is the outcome of leadership. Without it, a well-trained, incisive and analytical person cannot make a good leader (Mayer *et al.,* 2010). An emotionally intelligent leader is able to tell how much important an issue is over another so that he can prioritize on the important issues.

2.3 Concept of Transformational Leadership

Mokgolo *et al,* (2012) acknowledge that transformational leaders are essentially changing agents and as such, borrow heavily from known change models in managing effective transformation in organizations. Transformational leadership is often associated with progressive change in institutions sector, as well as enhancement of staff performance and satisfaction Roach & Mack, (2014). Leaders, who exhibit a transformational style of leadership, offer guidance that spurs intellectual curiosity

and inspires achievement in their followers. Additionally, by being attentive to staff needs and development, transformational leaders empower teams to develop skills in leadership, which subsequently improves their performance and outcomes.

Leaders, who exhibit a transformational style of leadership, offer guidance that spurs intellectual curiosity and inspires achievement in their followers. Additionally, by being attentive to staff needs and development, transformational leaders empower teams to develop skills in leadership, which subsequently improves their performance and outcomes. Transformational leaders influence practices associated with proactive initiative in driving change that can enhance the achievement of organizational goals. Realization of organizational goals and sustained performance improvement is the ultimate desire of every leader. The goals that transformational leaders communicate vary in metric terms, and are realized through the application of multiple strategic approaches Roach & Mack, (2014).

Bass and Riggio (2010) pointed out that, transformative leadership is a powerful model for a wide scope of fields and societies. Transformational leaders influence practices associated with proactive initiative in driving change that can enhance the achievement of organizational goals. Realization of organizational goals and sustained performance improvement is the ultimate desire of every leader. The goals that transformational leaders communicate vary in metric terms, and are realized through the application of multiple strategic approaches Roach & Mack, (2014).

Ismail and Yusuf (2013) states that a transformational leader inspires and challenges staff to have a vision, mission, and to own institutions and universities goals. The leader does urge and inspires subordinates to be articulate in the execution of duties,

while he/she takes care of them in a very individualized manner. Such leadership actions translates to workplace productivity and performance.

2.4 Concept of Transformational Leadership, Emotional Intelligence and Knowledge Sharing behavior Triangulation

According to Benson (2010), emotional intelligence covers the process of managing personal social and environmental changes by coping with a situation, solving problems and making decisions immediately, realistically and flexibly. It is a set of abilities related to processing emotions and emotional information. Güllüce and İşcan (2010) describe emotional intelligence as a combination of needs, motives and real values to manage individuals' attitudes that connects to human relations and determines the success in the workplace. Grace (2012) has found that emotional intelligence and capabilities are essential in success. Chopra and Kanji (2010) also argue that emotional intelligence can help in managing relations, understanding emotions, motivating and leading others.

Luu (2013) states that emotional intelligence can activate behaviour and acts as a layer between cognition and behavior. It has to be seen that high emotional intelligence level can help not only to manage our own emotions but also to manage emotions of others. This statement is highly supported in case when another person reacts with egoism or arrogance to shared knowledge or when he or she has too low self-efficiency to learn from others. Abzari *et al.* (2014) have identified that social and emotional competence have an impact on employees' knowledge sharing behaviour. Also, the effect of emotional intelligence competency has been proved to be positive and significant on knowledge sharing behaviour. Emotional intelligence intermediates between the cognitive and behavioural layer and people with high emotional

intelligence think and act more socially, especially in the case of knowledge sharing. Basically high emotional intelligence means a psychological safety that encourages knowledge sharing.

Gupta (2008) after examining postgraduate students in relation to emotional stability and knowledge sharing behaviour has proved that people with higher emotional stability would be more self-confident, more secure and fear less to be involved in knowledge sharing activities. On the other hand, he has examined not only the giver but the receiver part of knowledge sharing and has found that accepting knowledge should be voluntary without forcing and with reconciliation between parties. It also confirms that communication plays an important role in sharing knowledge and this way emotional intelligence can strengthen the communication and knowledge sharing. Knowledge sharing among other factors is a component of institutional intelligence. These components among others include information processing and adaptation skills which related to some literatures are related to emotional intelligence (Côté *et al.,* 2010)

According to Kalkan's (2014) Institutional learning process model, Institutional knowledge production process is based on Institutional learning which is embedded in the organizational intelligence. Each group has several factors and it has to be seen that emotional intelligence builds a part of organizational intelligence and knowledge acquisition, dispersion, interpretation, and knowledge storing, and these are forming the group of organizational learning (Yeniçeri and Demirel, 2007). The third group is called organizational knowledge production process and it involves sharing tacit knowledge. So Kalkan's model shows that emotional intelligence and knowledge sharing both have place in organizational learning process and they have significant

relations within this model. Dogan's (2013) model that describes the circle of development and sharing of tacit knowledge, has also proven that sharing tacit knowledge is based on emotional intelligence.

Othman and Abdullah (2009) have created a model that expresses relationships between emotional intelligence and tacit knowledge sharing. It shows that emotional intelligence and its dimensions affect teamwork and organizational citizenship behaviour of team members and also helps in achieving knowledge sharing. Karkoulian *et al.,* (2010) argue the importance to change employees' behaviour and attitudes in order to share their knowledge. They declare that emotional intelligence can play a key role in this process. This way emotional intelligence can be described as a source of human energy, information, connection and influence that helps in changing attitudes.

Ozler *et al.*, (2012) also proved positive relationship between dimensions of knowledge sharing and dimensions of emotional intelligence. Employees' tendency to share their knowledge is affected by not only organizational but also individual factors. As it has been already mentioned, in order to encourage employees to knowledge sharing, changes are necessary in their behaviors and attitudes, and emotions are the source of behavior. Emotional intelligence plays an important role in tendency of sharing knowledge (Karkoulian *et al.*, 2010).

Basically, if an employee has high emotional intelligence, he or she has more tendencies to share knowledge. So emotional intelligence can be an essential aspect in influencing knowledge sharing positively. Karkoulian *et al.,* (2010), after examining both the correlations between knowledge sharing and emotional intelligence and the influence of factors of emotional intelligence has found the following. Within the self-

awareness factor, if an employee is aware of his/her senses and mood shifts he/she would be more likely to assess the situation when deciding about knowledge sharing. Concerning self-management, an employee is able to decide objectively under different circumstances. Social awareness and relationship management can help show empathy and stimulate knowledge sharing behaviour. In other words, the motivation of knowledge sharing can be based on emotional intelligence rate: with higher inner motivation, people are more likely to share their knowledge because of altruism that is based on intrinsic motivation. That is the reason why this relationship among emotional intelligence and the motivations of knowledge sharing have been decided to be examined (Wang and Hou, 2015).

2.5 Theoretical Framework

This section reviewed the major theoretical framework applicable to the study and understanding of the knowledge sharing behavior. The theories discussed underpin the study variables and show how theories may be used to explain the phenomena of knowledge sharing behavior, transformational leadership and emotional intelligence as follows:

2.5.1 Social Exchange Theory

The social exchange theory (Blau, 1964) is a commonly used theoretical base for investigating individual's knowledge-sharing behavior. According to this theory, individuals regulate their interactions with other individuals based on a self-interest analysis of the costs and benefits of such an interaction. People seek to maximize their benefits and minimize their costs when exchanging resources with others (Molm, 2001). These benefits need not be tangible since individuals may engage in an

interaction with the expectation of reciprocity (Gouldner, 1960). In such exchanges, people help others with the general expectation of some future returns, such as gaining desired resources through social reciprocity. In order to maximize the resources gained, individuals may build social relationships with others by sharing their knowledge.

Davenport and Prusak (1998) have analyzed knowledge-sharing behavior and have outlined some of the perceived benefits that may regulate such behavior. These benefits include future reciprocity, status, job security, and promotional prospects. From this perspective, knowledge sharing will be positively affected when an individual expects to obtain some future benefits through reciprocation (Cabrera *et al.*, 2005). Previous studies have reported factors related to the social exchange theory as successful in explaining knowledge-sharing behavior among individuals. They include personal cognition, interpersonal interaction, and organizational contexts.

For example, Kankanhalli *et al.,* (2005) believed that an individual's perceived benefit is one of the major factors that encourage employees to contribute knowledge. According to Ma (2007), the amount of knowledge that people contribute for example depends on the level of satisfaction that they derive from being members of the community. Chiu *et al.* (2006) studied the effect of interpersonal factors such as social interaction, trust, and norm of reciprocity on knowledge sharing. Moreover, Kim and Lee (2006) have examined the organizational context for explaining knowledge sharing. Further, Watson and Hewett (2006) studied the effect of increased knowledge contribution within an organization. Kim and Lee (2006) found that reward systems were significant variables that affected employee knowledge sharing capabilities.

This theory contribution is one of the most powerful theories that help to explain the behavior of employees and employers at work places Blau *et al.* , (1964). It assumes that all human relationships are a matter of costs and rewards that people use to evaluate the worth of a relationship (Hamid, 2012).Cost is the part of a relationship where parties have to work and get exhausted. An example of a cost is offering knowledge to an employee by the universities. This is because the employer has to forego some finance and time for work from the employee by granting academic self-awareness, self-regulation, social skills, interpersonal skills and humility in order to motivate the employee. Similarly the benefits that the employer gets are the knowledge sharing outcomes.

The SET theory further expounds that interpersonal relationships are based on the self-interest of each party which means it has a motive to improve oneself through a relationship (West & Turner, 2010) .This analogy can be applied to an employer who gets improved services through increased knowledge sharing behavior. For social exchange relationship to thrive there should be fairness in the procedures, distribution and interactions between the employer and employees.

2.5.2 SECI Model for Knowledge sharing

The SECI model is a well-known conceptual model that was first proposed by Nonaka (1991 and expanded by Nonaka and Takeuchi, 1995). It describes how explicit and tacit knowledge is generated, transferred, and recreated in organizations. While it was first proposed within the context of business organizations, the model can easily be applied to education, as explored by Lin, and Huang (2008) and Yeh and Huang (2011). The SECI model consist of 3 elements namely: SECI, Ba and Knowledge Assets.

SECI Model

The SECI model consists of four modes of knowledge conversion: socialization (tacit to tacit), externalization (tacit to explicit), combination (explicit to explicit), and internalization (explicit to tacit).

Socialization is the process of sharing tacit knowledge through observation, imitation, practice, and participation in formal and informal communities (Yeh *et al.,* 2011). The socialization process is usually preempted by the creation of a physical or virtual space where a given community can interact on a social level.

Externalization is the process of articulating tacit knowledge into explicit concepts (Yeh *et al.,* 2011). Since tacit knowledge is highly internalized, this process is the key to knowledge sharing and creation.

Combination is the process of integrating concepts into a knowledge system (Yeh *et al.,* 2011).

Internalization is the process of embodying explicit knowledge into tacit knowledge (Nonaka & Takeuchi, 1995).

The interplay between tacit and explicit knowledge is illustrated below.

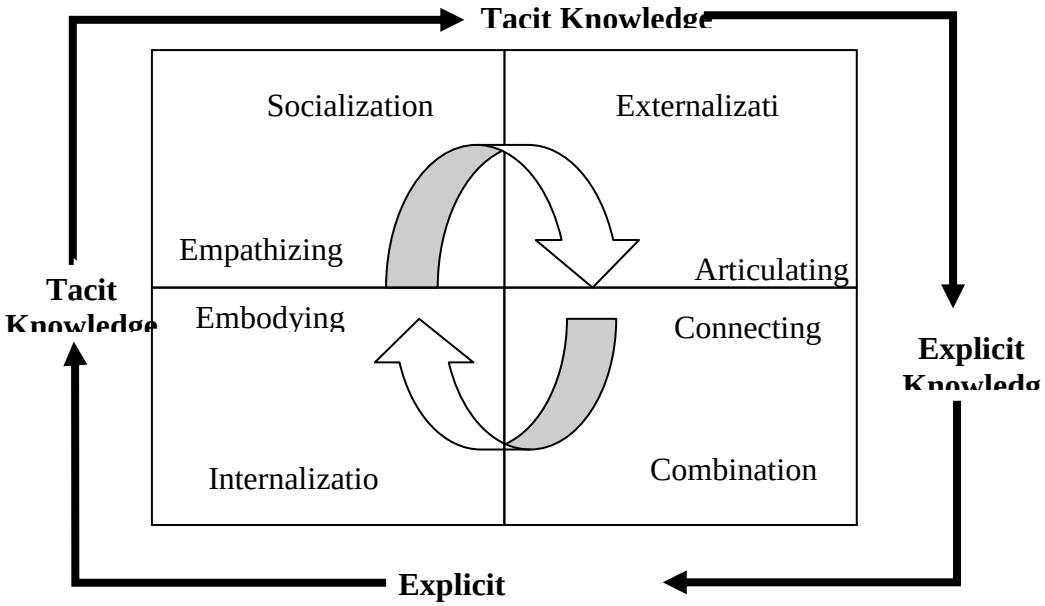

Figure 2. 1: The SECI model (Nanaka & Takeuchi, 1995)

Ba

Ba is an integral concept in the SECI model. It is often described as a context within which knowledge is shared, created, and utilized (Nonaka & Takeuchi, 1995). As with the modes of knowledge conversion delineated by Nonaka (1991), there are four categories of *ba*.

Originating *ba* can be described as using physical or virtual knowledge where individuals interact with one another (Nonaka & Takeuchi, 1995).

Dialoguing *ba* can be described as the sharing of tacit knowledge among professionals to create knowledge (Nonaka & Takeuchi, 1995). For example, as professors dialogue on this forum, their tacit knowledge can be used to inform individual and collective classroom practices.

Systemizing *ba* can be described as the analysis and measure of created knowledge once it is applied in practice (Nonaka & Takeuchi, 1995).

Exercising *ba* its where knowledge can be improved (Nonaka & Takeuchi, 1995). The interplay between the four categories of *ba* is illustrated below.

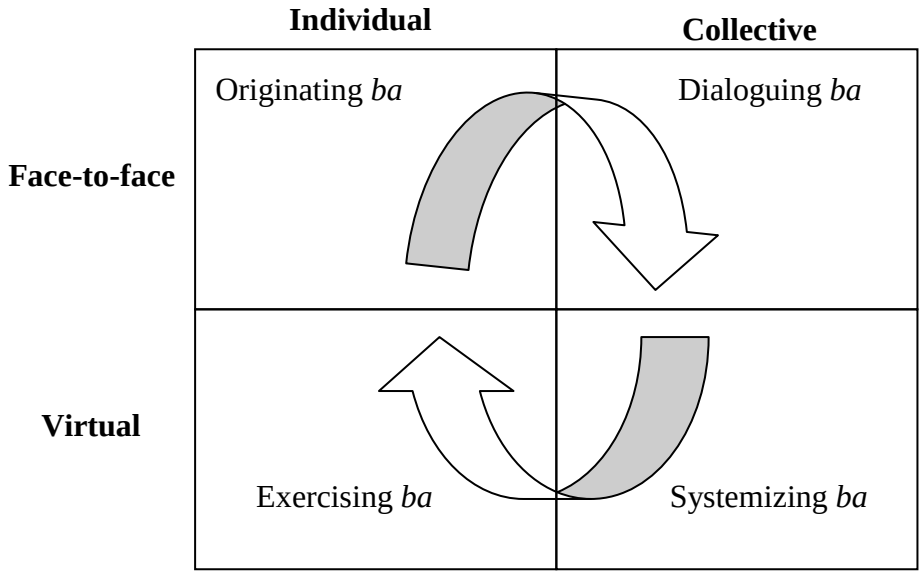

Figure 2. 2: Four categories of ba (Nonaka & Takeuchi, 1995)

Knowledge Assets

Nonaka and Takeuchi (1995) also delineated four knowledge assets that are considered indispensable to enhance the value of a firm. These four knowledge assets can be easily applied to educational institutions (Ozmen, 2010). As in any organization, knowledge creation and exploitation in education must be effectively managed. The figure below helps to create an inventory of an institution's knowledge assets. Since knowledge assets are inherently dynamic, cataloging is not enough (Nonaka & Takeuchi, 1995). New and existing knowledge assets must be effectively delineated and integrated to create a knowledge system.

Table 2. 1: Four categories of knowledge assets (Nonaka & Takeuchi, 1995).

Experiential knowledge Assets Tacit knowledge through common experiences • Skills and know-how of individuals • Care, love and trust • Energy, passion and tension	**Conceptual Knowledge Asset** Explicit knowledge articulated through images, symbols and language. • Product concepts • Design • Brand equity
Routine knowledge assets Tacit knowledge routinized and embedded in actions and practices • Know- how in daily operations • Organization routines • Organizational culture	**Systemic Knowledge assets** Systemized and packaged explicit knowledge • Documents, specs, manuals • Database • Patens and licenses

The model from Nonaka and Takeuchi is based on Polanyi's distinction between tacit and explicit knowledge (1983) and provides an understanding of knowledge creation and management.

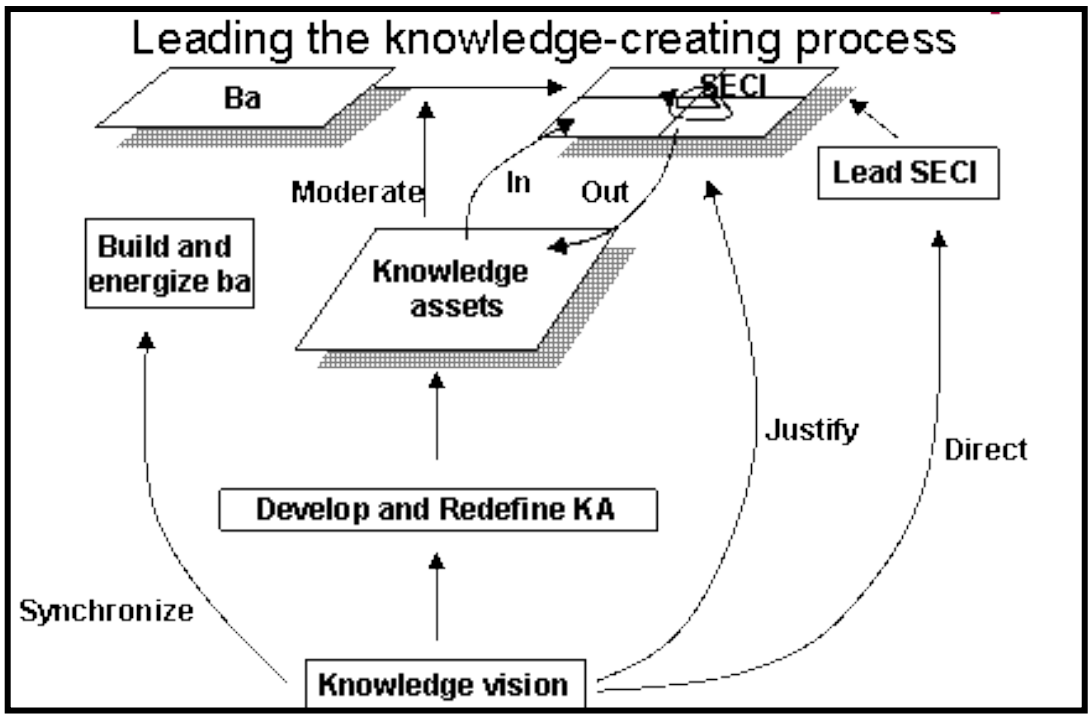

Figure 2. 3: Nanaka & Takeuchi, 1995

This theory contributes that Nonaka and his associates suggested that the movement through the four processes of SECI forms a "spiral" by expanding horizontally and vertically across organizations (Nonaka *et al.,* 2000). They assert that the spiral starts

with a socialization phase, in which tacit knowledge of individuals is exchanged. This is followed by an externalization phase, in which new tacit knowledge is translated into explicit knowledge. This explicit knowledge is pooled with existing explicit knowledge in the combination phase. The turn of the spiral concludes with the internalization phase, in which this new explicit knowledge is absorbed by individuals and enriches their tacit knowledge base. Then the tacit knowledge is exchanged again, and the knowledge creation process continues along the spiral (Andreeva and Ikhilchik, 2011). Therefore, Nonaka *et al.,* (2002) concluded that organizational knowledge creation is a never-ending process that upgrades itself continuously.

2.5.3 Mayer, Salovey and Caruso's Emotional Intelligence Ability Model

This model suggests that information from the perceived understanding of emotions and managing emotions is used to facilitate thinking and guide our decision making. This emotional intelligence emphasizes the four-branch model of emotional intelligence. Mayer, Salovey, and Caruso (2004) developed the four-branch ability model of emotional intelligence. They suggest that the abilities and skills of emotional intelligence can be divided into 4 areas the ability to: Perceive emotion; Use emotion to facilitate thought; understand emotions; and finally manage emotions. These branches, which are ordered from emotion perception through to management, align with the way in which the ability fits within the individual's overall personality (Mayer et al., 2016).Branches 1 and 2 represent the somewhat separate parts of information processing that are thought to be bound in the emotion system whereas, emotion management (branch 4) is integrated into his/her plans and goals (Mayer et al., 2004). Also, each branch consists of skills that progress developmentally from more basic skills through to more sophisticated skills.

This model contributes that, Mayer, Salovey, and Caruso, skills descriptions is what define emotional intelligence. Based on the developments in emotional intelligence research, Mayer, Caruso, and Salovey updated the four-branch model and included more instances of problem-solving and claimed that the mental abilities involved in emotional intelligence do, in fact, remain to be determined (Mayer *et al.,* 2016).

They further suggested that emotional intelligence is a broad, 'hot' intelligence. (Mayer *et al.,* 2018) included a practical, social and emotional intelligence in their understanding of 'hot' intelligences. So called 'hot' intelligences are those in which people engage with subject matter about people (Mayer *et al.,* 2016). Mayer *et al.,* (2016) invite comparison of emotional intelligence with the personal and social intelligences and they contend that emotional intelligence can be positioned among these other 'hot intelligences'. It was argued that the specific abilities that emotional intelligence consists of are specific forms of problem-solving (Mayer *et al.,* 2016).also by 1980s, psychologists were focused on the importance of skills sets that may be needed to process information and promote success and leadership. These same skills sets are also important in terms of personal fulfillment and happiness in relationships and emotions that enhance emotional intelligence in leadership.

2.5.4 The Theory of Planned Behavior (TPB)

The study adopted Ajzen's new model Theory of Planned Behavior (2002), which provided a framework to study the academics' knowledge sharing behavior. Theory of Planned Behavior has emerged as one of the most influential and popular conceptual frameworks to study individuals' behavioral intentions and actual behaviors (Lin & Lee 2004). According to Azjen (1985), human behavior is guided by three kinds of salient beliefs: behavioral beliefs about the likely consequences or attributes of the

behavior, normative beliefs about the normative expectations of other people, and control beliefs about the presence of factors that may facilitate or hinder the performance of the behavior. In their respective aggregates, behavioral beliefs produce a favorable or unfavorable attitude toward the behavior; normative beliefs result in perceived social pressure or subjective norms; and control beliefs give rise to perceived behavioral control, the perceived ease or difficulty of performing the behavior. In combination, attitude, subjective norms, and perceived behavioral control lead to the formation of a behavioral intention.

Conceptual and methodological ambiguities concerning the concept of perceived behavioral control, Ajzen (2002) stated that perceived behavioral control should be viewed as two interrelated components, which he identified as self-efficacy and controllability. According to Ajzen (2006), the more favorable the attitude and subjective norm, the greater the self-efficacy and controllability, the stronger should be the individual's intention to carry out the behavior. Intention itself is regarded as the immediate antecedent of behavior.

Behavior is the degree to which an individual actually decides to perform or not perform a specific action and it is determined by the individual's intention to perform it or not (Ajzen, 2002). Robertson (2002) states that knowledge sharing is human action. Therefore, knowledge sharing behavior itself is an individual's optional behavior, not directly recognized, and in the collective supports effective functioning of an organization's operations and performance (Bordia, *et al.*, 2006). Intention is an individual's willingness to engage in a certain behavior (Ajzen, 2002) and it is the most significant predictor and central factor influencing behavior (Ajzen 2002).Consequently, according to Theory of Planned Behavior, an academic's

knowledge sharing behavior is the degree to which an academic actually shares his/her knowledge with others. Based upon Theory of Planned Behavior, the intention to share knowledge is the individual's willingness and readiness to engage in knowledge sharing behavior. Thus, an individual's intention to share knowledge highly determines his/her actual behavior to share knowledge (Alajmi, 2011).

In knowledge sharing context, researchers found that intention directly and significantly affects an individual's knowledge sharing behavior (Alajmi, *et al.,* 2011). Attitude is the degree to which an individual has a favorable or unfavorable evaluation of the behavior (Ajzen, 1991). Attitude towards the behavior is an influential factor to perform that behavior (Ajzen *et al.,* 2002) only indirectly by influencing the individual's intention, which is more closely linked to the behavior in question (Ajzen, 1991). Attitude determines the individual's intention to perform knowledge sharing behavior (Alajmi, 2010). The more favorable the individual's attitude toward sharing knowledge, the stronger his/her intention to share knowledge. Researches (Ellahi & Mushtaq, 2011) have demonstrated a significant positive relationship between attitude and intention to share knowledge. Subjective norms: This is defined as the individual's perceived social pressure to perform or not to perform a given behavior (Ajzen, 1991). Thus, subjective norms refer to the individual's belief that important relevant others, including executive board, senior management, supervisor, and the peer group, expect him/her to engage in the behavior of interest (Chennamaneni, 2006). In terms of knowledge sharing, subjective norms refer to how the individual perceives others' view of sharing knowledge. Thus, the stronger the individual's perceived subjective norms, the stronger his/her intention to share knowledge.

Researches (Alajmi, 2010) proved that subjective norms are significant determinants of an individual's intention to share knowledge. Self-efficacy: it's an individual's confidence in the ease or difficulty to perform the behavior in question (Ajzen, 2002), and is considered an important factor influencing an individual's intention to perform the behavior. According to Constant *et al.,* (1994) an individual with high self-efficacy is more confident to share knowledge with others, therefore, the greater the individual's self-efficacy, the stronger his/her intention to share knowledge. Moreover, researchers (Bock & Kim, 2002) found that self-efficacy significantly motivates an individual's intention to share knowledge. Controllability is an important determinant that influences an individual's behavior through intention (Ellen & Ajzen, 1992). In knowledge sharing, controllability is referred to as an individual's beliefs, based on the available resources, about the extent to which performing knowledge sharing behavior is up to him/her (Ajzen, 2002). Thus, the greater the individual's level of control over his/her knowledge sharing capabilities, the stronger his/her intention is to share knowledge. Researchers found that controllability is a significant determinant in influencing an individual's intention to share knowledge (Hung *et al.,* 2010).

This theory contributes greatly to the study since According to Azjen (1985), human behavior is guided by three kinds of salient beliefs: behavioral beliefs about the likely consequences or attributes of the behavior, normative beliefs about the normative expectations of other people, and control beliefs about the presence of factors that may facilitate or hinder the performance of the behavior. Behavior is the degree to which an individual actually decides to perform or not perform a specific action and it is determined by the individual's intention to perform it or not (Ajzen, 2002). Robertson (2002) states that knowledge sharing is human action. Therefore,

knowledge sharing behavior itself is an individual's optional behavior, not directly recognized, and in the collective supports effective functioning of an organization's operations and performance (Bordia, *et al.,* 2006).

2.5.5 Transformational Leadership Theory

Transformational leadership theory involves an exceptional form of influence that moves followers to accomplish more than what is usually expected of them" Northouse (2016). Transformational leadership influences behaviors associated with leadership effectiveness in driving change and transform organization to success. Northouse (2016) explains that leaders who have the ability to engage and influence others will be able to apply transformational leadership theory. He associates these leaders with charisma, which he explains as a capacity to inspire others and justifies as necessary in order to forge dynamic relationships between leaders and followers. Northouse agrees with many scholars that the factors of transformational leadership include idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. These factors require a certain set of behaviors in leaders in order to create a shared vision and to reach organizational goals. Northouse (2016).

The original formulation of transformational leadership theory comes from Burns (1978). At the core of transformational leadership is the concept of transformation, or change of the organization. Tichy and Devanna (1986) noted that companies were being asked to make fundamental changes. Transformational leadership best reflects this change (Bass, 1985). Burns (1978) defined transformational leadership as a process in which "leaders and followers raise one another to higher levels of morality

and motivation". A chief element of transformation is the ability to cultivate the needs of the follower in a follower centered (person-centered) manner.

According to Burns, focusing on needs makes leaders accountable to the follower. First, Burns contended that followers are driven by a moral need, the need to champion a cause, or the need to take a higher moral stance on an issue. People like to feel that a higher organizational spiritual mission guides their motives. The second need is a paradoxical drive for consistency and conflict. Transforming leaders must help followers make sense out of inconsistency. Conflict is necessary to create alternatives and to make change possible. The process of transformation is founded on empathy, understanding, insight, and consideration; not manipulation, power wielding, or coercion.

Transformational Leadership (TL) According to Burns, (1978) is a process in which leaders and followers help each other to develop higher level of motivation and morale. Transformational Leadership enhances level of Knowledge sharing and improves the process of Knowledge sharing and implements Knowledge sharing in any organization (Noruzi, *et al.*, 2013). There are four dimension of transformational leadership i.e. Idealized Influence or Charismatic leadership, Inspirational Motivation, Intellectual Stimulation, Individualized Consideration and considered as "the Four I's" (Bass & Avolio, 1994). Current studies and researchers have selected one more dimension that is risk acceptance (Xiaoxia & Jing, 2006).

Idealized Influence (II) by using charismatic or idealized influence transformational leaders impress their subordinates. Moreover, such type of leaders, in the time of difficulty listen and solve problems of their workers. These leaders have

proficiencies and enthusiasm to solve the problems of employees (Bass & Riggio, 2006)

Inspirational Motivation (IM) Inspirational motivation is a process in which leaders motivate and encourage employees by providing them meaningful and challenging task. For envision of optimistic future, leaders encourage their employees and promote team spirit, enthusiasm, and optimism among themselves (Bass, *et al.*, 2003).

Intellectual Stimulation (IS) in this behavior, leaders encourage employees to think in creative, innovative and effective way. They involve them in decision making process and also find solution of problems that influence their social, political, environmental, economic wellbeing (Nwagbara, 2010).

Individualized Consideration (IC) In this trait of Transformational Leadership, leaders act as a mentor and provide special attention to each employee's need. Leaders individually guide and support employees to find their potential skills and act accordingly (Bass & Riggio, 2006).

Risk Acceptance (RA) Risk acceptance is a characteristics of a leader that is now included in transformational leadership's dimensions because transformational leaders accept risk positively and view risk as opportunity rather than threat. In this characteristic, leaders show their risk acceptance attitude when they face technological and organizational problems (Xiaoxia & Jing, 2006.

This theory contributes that universities can only provide the best service quality and gain competitive advantage by utilizing and managing knowledge (Hallin Marnburg, 2007). Since Knowledge Sharing is very important for the success of universities. The

theory further contributes that knowledge-focused and intensive organization culture should be encouraged with different types of leadership, settle mutual trust, build up networks that support Knowledge Sharing practices, enhanced formal and informal knowledge sharing, (Pasher and Ronen, 2011). Leaders can play critical role in Knowledge sharing practices by exhibiting some specific behaviors that characterize Transformational Leadership behaviors. For instance, Transformational Leaders could enhance a shared vision and provide requisite motivation, systems, structures and willingness to initiate Knowledge Sharing (Shi, 2010). Furthermore, they can provide an appropriate model to employees by exhibiting a willingness to share knowledge, continuous learning and seeking new ideas or knowledge (Wong, 2005).

Those leaders can create an organizational climate enabling and facilitating Knowledge Sharing (Salo, 2009). Transformational Leadership can act as a knowledge creator by supplying know-how to their followers during Knowledge Sharing practices (Lee *et. al.*, 2010). They can play a holistic role in Knowledge Sharing by enabling a well-supported collaboration among employees (Cioldi, 2012). They also can improve knowledge transfer and utilization by sharing all knowledge, enhancing pre-established roles, responsibilities and rewarding systems, boosting employee expertise, fostering adaptation to strategic goals and supporting quality commination among employees (Green and Aitken, 2006).

Thus, Transformational Leadership can be essential facilitators and determiners of Knowledge Sharing practices (Chen and Barnes, 2006), and they considerably encourage the Knowledge Sharing process. transformational leaders contributes to Knowledge Sharing practices by articulating a shared vision, providing an appropriate model, fostering adaptation to group goals, inspiring employees, supporting

innovative ideas, building up necessary systems or structures and culture, and actively participating in Knowledge Sharing process.

2.5.6 Empirical literature

Abzari *et al.,* (2014) have identified that social and emotional competence have an impact on employees' knowledge sharing behavior. Also, the effect of emotional intelligence competency has been proved to be positive and significant on knowledge sharing behavior. Emotional intelligence moderates between the cognitive and behavioral layer and people with high emotional intelligence think and act more socially, especially in the case of knowledge sharing. Basically high emotional intelligence means a psychological safety that encourages knowledge sharing (Kessel *et al.,* 2012). Arakelian *et al,* (2013) have conducted a structural equation modeling between emotional intelligence and knowledge sharing. Whose research pinpoints a meaningful positive relationship between the two areas. Moreover, it has found positive relationships among three dimensions of emotional intelligence: self-awareness, social-awareness and relation management, and knowledge sharing.

Othman and Abdullah (2009) have created a model that expresses relationships between emotional intelligence and knowledge sharing. It shows that emotional intelligence and its dimensions affect teamwork and organizational citizenship behavior of team members and also helps in achieving knowledge sharing. Karkoulian *et al.,* (2010) argue the importance to change employees' behavior and attitudes in order to share their knowledge. They declare that emotional intelligence can play a key role in this process. This way emotional intelligence can be described as a source of human energy, information, connection and influence that helps in changing attitudes. Organizations realize the key factors of knowledge sharing. It is stated that

human factors and people's identity are fundamental for their motivation and commitment. It is proven that emotional intelligence has a positive influence on knowledge sharing, that employees with high emotional intelligence are more likely to ignore their personal interest in favor of their team's effectiveness, and that they tend to share their experiences and knowledge more likely (Karkoulian *et al.,* 2010). Özler *et al.,* (2012) also proved a positive relationship between dimensions of knowledge sharing and dimensions of emotional intelligence.

Employees' tendency to share their knowledge is affected by not only organizational but also individual factors. As it has been already mentioned, in order to encourage employees to knowledge sharing, changes are necessary for their behaviors and attitudes, and emotions are the source of behavior. Emotional intelligence plays an important role in the tendency of sharing knowledge (Cote and Miners, 2006). Individuals can find knowledge sharing costly and uncomfortable, so to make them feel sharing knowledge is socially good and benefits the organization is really important. Basically, if an employee has high emotional intelligence, he or she has more tendency to share knowledge. So emotional intelligence can be an essential aspect of influencing knowledge sharing positively (Karkoulian *et al.,* 2010).

Lindebaum (2009) after examining both correlations has found the following. Within the self-awareness factor, if an employee is aware of his/her senses and mood shifts he/she would be more likely to assess the situation when deciding about knowledge sharing. Concerning self-management, an employee is able to decide objectively under different circumstances. Social awareness and relationship management can help show empathy and stimulate knowledge sharing behavior. In other words, the motivation of knowledge sharing can be based on emotional intelligence rate: with

higher inner motivation, people are more likely to share their knowledge because of altruism that is based on intrinsic motivation (Wang and Hou, 2015).

2.6 Relationship between Emotional Intelligence and Knowledge Sharing Behavior

2.6.1 Effect of Self-awareness on Knowledge Sharing Behavior

Self-Awareness of one's emotions, what causes them, and how we handle them is important in emotional intelligence (Carmeli, 2003). Leaders who are aware of their emotions are able to manage them, (rather than to react to them) and adequately respond to situations as they come up. A self-aware individual understands what drives their behaviour, as well as the effects that it has on others. The most common trademarks are self-deprecating humour, realistic assessments of one's conduit, and a healthy dose of self-confidence. This means the ability to not take yourself too seriously, while at the same time understating your value. Instead of reacting to their emotions, they are able to engage their thinking capacity to come up with better decisions. Reacting to emotions can damage relationships among staffs. Self-aware leaders have a high awareness of the emotions of those around them. They are therefore able to get to the cause of strong emotional reactions of others Goleman, (2010). Leaders should not only pick words being spoken but also emotions behind the words. People feel they are being heard when their emotions are acknowledged.

Every moment of life of all humans are always within an experiential triangle of thoughts, emotions and actions. No matter what is going on, one is always thinking, feeling and doing and all these are happening simultaneously and spontaneously. Thoughts being powerful affect how a person feels and what a person does. But then emotions are equally powerful and so how a person feels affect his thoughts and

actions. According to Lennick and Keil (2008), all emotions like fear, anger, optimism etc., control our thoughts and lead us to action or inaction. These are noticed by colleagues in any workplace and they affect work relationship. It is self-awareness that enbles one to analyze one's thoughts, attitudes, feelings and actions, help to understand oneself better, make one act and react appropriately to situations. This awareness, which is to understand oneself, one's goals, intentions, responses, behaviour or being intelligent in picking up what is going on inside oneself, is vital to reduce personal stress and assist in creating smoother relationships and a positive work climate in any workplace for knowledge sharing Goleman (2010)

2.6.2 Effect of Self-regulation on Knowledge Sharing Behavior

Zimmerman (2005) defines self-regulation as "self-generated thoughts, feelings, and actions that are planned and cyclically adapted to the attainment of personal and institutional and organizational goals". He notes that self-regulation is a key human capability that provides us with an adaptive edge and enabled us to survive. He posits that our self-regulatory skill or lack of thereof is the source of our perception of personal agency. He views self-regulation as a triadic process of interaction of personal, behavioral and environmental factors. He points out that self-regulation is not a singular trait, ability or a stage of competence.

Self-regulation consists of an ability to think prior to acting, and also to suspend emotional judgment on occurrences. In addition to this, it involves having control over mood swings and impulses, and thus not allowing them to disrupt one's quality of life. Its trademarks include openness to change, integrity, reliability, and an ease in accepting ambiguity.

Zeidner *et al* (2012), self-regulation "involves cognitive, affective, motivational and behavioral components that provide the individual with the capacity to adjust his or her actions and goals to achieve desired results in light of changing environmental conditions". Schraw *et al.,* (2016) modeled self-regulation in science education and partitioned it into three components, namely cognition, metacognition, and motivation.

Carroll and Bahr (2013,) viewed self-regulation on both learners and staff individuals as having the capacity to "actively set goals, decide on appropriate strategies, plan their time, organize and prioritize materials and information, shift approaches flexibly, monitor their teaching and learning by seeking feedback on their performance and make appropriate adjustments for future learning activities". Some recent studies specifically promote the uptake of self-regulation in various contexts at the university level of education. Seraphin *et al.,* (2012) found evidence that metacognitive reflection is a significant driver of change in the scientific thought patterns of students, resulting in better critical-thinking and scientific skills.

As determined by Chih-Jou Chen and Shiu-Wan Hung (2010), knowledge sharing and self-regulation is one's confidence in an ability to provide knowledge that is valuable to others. In their study, Knowledge sharing self-regulation is the member's self-evaluation and confidence in his or her skills and capabilities to respond to questions posted by other members, and to provide knowledge that is valuable and useful to others. Through sharing useful knowledge, people feel more confident in what they can do. Bock and Kim (2012) propose that self-efficacy could be treated as a major factor of self-motivational source for knowledge sharing. Their discoveries disclose

that the individual's judgment of his/her contribution to organization performance has a positive influence on knowledge sharing.

2.6.3 Effect of Social Skills on Knowledge Sharing Behavior

Davenport & Prusak (2000) argues that employees interact and communicate daily. Their conversations, constitute nothing else than means of sharing knowledge to complete their tasks, to solve problems and learn. Improved relationships between employees, better communication ways and an increased level of trust are factors that enhance knowledge sharing. Furthermore, social skills are one of the core characteristics of human beings, organizing their life around their relations with other people. The more they get to know each other the more they acknowledge each other's' feelings, emotions and behaviors, the more they will be able to communicate effectively. Each individual comes with his/her unique set of ideas, perspectives and work style.

Possessing empathic traits does not necessarily involve feeling compassion for others, but rather understanding their emotional makeup and treating them according to subsequent reactions. Trademarks consist of customer service skills, the ability to recruit talent, and sensitivity to sociocultural factors` such as gender, ethnicity, or sexual orientation. Foss, et al (2010) agreed upon the fact that knowledge sharing through social skills among staff is highly beneficial to the organizations, providing for improved innovation capacity, greater problem-solving capacity, new knowledge, and capabilities, all of these sustaining the competitive advantage of the organization.

Davenport & Prusak (2000) came up with a very simple suggestion, Hire smart people and let them talk to one another. In their opinion, the transfer of knowledge is taking

place within the organization as a natural routine either when the members of the organization communicate with each other or work together Kalling & Styhre (2003). Everyday socialization is a means of knowledge sharing and distribution within the organization. Therefore, the process of knowledge sharing should not be regarded as an additional organizational phenomenon, but as inherited in the daily activities performed by the members of the organization Huysman & Wit, (2002).

Kalling & Styhre, (2003) argues that conversations between individuals facilitate imitations and inventions. They drive social skills as conversations are strong means of invention and proliferation of ideas, feelings, and modes of action. Consequently, face to face interaction and spoken communication are the successful application and sharing of knowledge and skills acquired throughout organizational experiences. As a result, knowledge sharing within the organization should not be considered a difficult, time consuming and out-of-the-ordinary process, but more as a routine, costless, and instantaneous process. Bock *et al.*, (2005) says that the sharing of knowledge between individuals, and between them and the organization relies significantly more on staff knowledge sharing behaviors than on institutional context. If the institution is not built around a knowledge-friendly culture from the beginning, then no social skills or technology-wise or alike system will foster the share of knowledge. Huysman & Wit, (2002).

Burges (2005) also argues that there is the tendency of institutions to focus mainly on tools, like implementing different collaborative software for knowledge sharing, or on tasks, such as organizational routines and norms and pay less attention to the interactions between people and their characteristics and motivations as knowledge sharing facilitators. Consequently, one of the major reasons why knowledge sharing is

still a challenge, the exception rather than the rule Bock, *et al*., (2005), is that knowledge is embodied in individuals and therefore, they are the ones making choices about sharing their knowledge. Cabrera & Cabrera (2005) posits that if individuals consider their knowledge to be useful to others, they will be more likely to make the effort to share it. Thus, the level of sharing increases when individuals believe that their contribution makes a difference and their level of self-efficacy is high, in an environment where employees socialize and interact frequently, with little regard to their organizational status, they become knowledgeable about the resources they can find in their colleagues.

Connelly & Kelloway, 2003), argues that this, in turn, inspires them to share their knowledge, help each other, with the result of increasing the importance of information redundancy when achieving optimal results. Redundant information provides also for new perspectives when it comes to problem-solving. Social skills refer to a wide range of skills related to behaviour, manner, communication, proper dress, etc. in the presence of other people.

2.6.4 Effect of Interpersonal Relations on Knowledge Sharing Behavior

Grieve *et al.,* (2013) defined the interpersonal relationship as a kind of relationship between a few groups of people; it includes ideas, expectation, awareness, and reaction of an individual to others. Schutz (2002) proposed an interpersonal relationship as a need between people; it contains three different levels of needs, namely affection, inclusion, and control. Affection refers to the desire of expressing emotions and gaining affection from others; inclusion refers to the hope of an individual of being accepted and recognized; control refers to the desire of an individual to influence people, things, and objectives in certain aspects. Interpersonal

relationships in real life emphasize real interaction and shared activities among friends, peers, parents, and teachers (Chang *et al.,* 2011). Individuals are driven to develop and continue positive social relationships in order to experience a sense of belongingness.

When one possess strong interpersonal skills, the effortless form relationships with peers, as well others in managing good and correct relationship established and natured as a trademark characteristic which consist of team leadership capacities, managerial aptitudes, and persuasiveness. Chen (2011) proposed that knowledge sharing is a voluntary activity in which knowledge is transmitted and distributed from one individual to others. There are numerous variants of such definitions stressing the importance of knowledge transfer through interpersonal relations from an employee to another.

Similarly, Yang and Lai (2011) emphasize the potential usefulness of knowledge transferred to others. Thus understood, knowledge sharing as a process by which an individual imparts his or her expertise, insight, or understanding to another individual so that the recipient may potentially acquire and use the knowledge to perform his or her task(s) better. The ways in which knowledge may be transferred to other employees include, for example, e-mail, conferences, chats, internet sites, seminar presentations, mentoring, and meetings (Peyman *et al.,* 2013).

Realizing and recognizing the importance of intrapersonal communication to productivity and profit of an organization, there has been a paradigm shift from the sole importance bestowed on intelligence quotient alone for a job. Importance on emotional intelligence and communication skills to improve the work environment and efficiency of people and business is now being openly acknowledged in the

business circle. In the present work culture EQ is given as much importance as IQ. Most worthwhile jobs have a 'people component' as the most lucrative positions often involve a large amount of time spent interacting with employees, media and colleagues. It is rare that an individual can remain isolated in his/her office and still excel in his/her job. Most organizations are therefore looking for individuals with a particular tactical skill set: the ability to work well in a team and to influence and motivate people to get things done. (Peyman *et al.,* 2013).

2.6.5 Effect of Humility on Knowledge Sharing Behavior

Humility is the lack of feeling of superiority, arrogance, and haughtiness of a person towards other people. It is treating all people regardless of who they are, with respect, gentleness, kindness, and forgiveness. Humility has been described from a positive aspect with emphasis on strength rather than weakness (Tangney, 2000). Humility is one of the core characteristics of human beings, organizing their life around their relations with other people. Legitimate, Humility is a virtue that concerns human limits on how to view and handle human limits productively, adaptively, and constructively. Given its focus on limits, no wonder humility makes some uncomfortable. A great deal of research and popular attention has been devoted to the role of humility in organizations since 2000. Humility has recently been defined as a dispositional quality of a person whether that person is a leader or an employee that reflects ‘a self-view that something greater than the self exists’. This exposes humility as an important construct on knowledge sharing behavior. (Ou *et al.,* 2014).

Crossan *et al.,* (2008) postulates that humility in organizations is an idea whose time has come. In light of anticipated challenges and changes that continue to unfold in the 21st century, scholars in institutions have suggested a greater need for organizational

members to have the humility to acknowledge areas of ignorance and inexperience and to foster the learning and adaptation that will be required to succeed in an increasingly unpredictable workplace. Most scholars need to possess humility in order to explore their potentials. Humility idea is a ripe ingredient and debatable concept. Humble persons possess a self-regulatory capacity that guards against excess arrogance and fosters pro-social tendencies (Jankowski *et al.,* 2013).

In understanding humility it is important for university scholars and practitioners alike because it underlies the choice and capacity to approach one's work (and life) from a larger, interdependent perspective that is productive, relational and sustainable. Humility is generally considered a character strength that is deeply aligned with and uniquely representative of the interdependent nature of today's universities and intelligence of academicians to foster knowledge (Frostenson 2016).Humble individuals do not have strong needs to self-enhance or to dominate others thus high ability to give and receive knowledge (Peterson and Seligman 2004).

2.7 Moderating effect of Transformational Leadership on the relationship between Emotional Intelligence and Knowledge Sharing Behavior

Leadership is defined by knowledge, skills and abilities, rather than by position or title. The core competencies of leadership can be learned, and the learning is a life-long process. Leadership is a process of social interaction where the leader's ability to influence the behaviour of their followers can strongly influence performance outcomes (Pirola Merlo *et al.,* 2002). Leadership is intrinsically an emotional process, whereby leaders recognize followers' emotional states. As Mayer *et al.,* (2000) argue, a high level of emotional intelligence enables a leader to be better able to monitor how workgroup members are feeling and to take appropriate action. People in

leadership positions need to demonstrate and spread positive emotions (Prati *et al.,* 2003) and lack of emotional control has been found to be associated with leadership ineffectiveness (Goleman, 1998b).

Current research work is increasingly recognizing the importance of emotions. George (2000) in a study describes how aspects of emotional intelligence, including the appraisal and expression of emotions, knowledge of emotions and management of emotions, facilitate leaders' ability to develop collective goals with followers, communicate the importance of work activities to followers and motivate followers by generating enthusiasm, confidence, and trust. In a similar way, Bass (2002) notes that several aspects of emotional intelligence are critical for transformational leaders who score high on visionary leadership and individualized consideration. Engaging followers by conveying an inspiring vision through emotional language and communication has been considered as the most important role of leaders in organizations (Ashkanasy *et al.,* 2000).

The greater the leaders' emotional intelligence, the better leaders are at managing strong relationships by using emotions, and the better they are able to demonstrate effective performance (George *et al.,* 2000). Furthermore, to be of benefit to a team and the work group, it has been suggested that leaders need to establish strong emotional relationships with team members Goleman *et al.,(*1998b), and be able to effectively manage those relationships (George et al., (2000). Hence, it may be said that leadership is intrinsically an emotional process, whereby leaders recognize and manage follower's emotional states (Humphrey, 2002) and where emotional intelligence is viewed as an important determinant of effective leadership (George, 2000).

Emotional intelligence is a critical component of leadership effectiveness, particularly as leaders deal with teams and workgroup members. Emotionally intelligent leaders serve as a benefit to teams in two ways. Leaders motivate team members to work together towards team goals. Leaders also serve as a transformational influence over team members. In this manner, leaders challenge the members of the team to work towards increasing team effectiveness and performance, facilitate team member interaction dynamics, build interpersonal trust and inspire members to implement the articulated vision (Goleman *et al.,* 2002).

According to Brown *et al.,* (2006) adherence to professional or moral standard of behavior are common aspects of both emotional intelligence and transformational leadership. Barling, *et al.,* (2000) observe that emotional intelligence is associated with three dimensions of transformational leadership such as idealized influence, inspirational motivation, and individualized consideration.

Gardner and Stough (2002) state that the ability to manage emotions in relationships allows the emotionally intelligent leader to understand followers needs and to react accordingly. Researchers in the area of leadership state that effective transformational leaders must possess emotional intelligence. These elements are considered critical to inspire followers and to build strong relationships.

According to Benson (2010), emotional intelligence covers the process of managing personal social and environmental changes by coping with a situation, solving problems and making decisions immediately, and realistically. It is a set of abilities related to processing emotions and emotional information. Previously, transformational leaders were seen to be less successful within public universities as compared to private entities. This was deemed so from the understanding that public

universities were relatively bureaucratic with tight control mechanisms than private organizations (O'Connor, 2013). Transformational leaders in the education industry were also seen to be responsible for laying the foundation for changes in the organizational culture, strategies and even structures that are similar to any other corporate setting (Yu& Jantzi, 2012). Strategies may include the development of employees to attain a higher professional level that will directly increase their (Clark *et al.,* 2008) capabilities, innovativeness and give more empowerment to their subordinates to shape initiatives that will bring about the much-needed changes.

Generally, research is positive on the role of transformational leadership in achieving results. Limsili & Ogunlana (2008), for example, found that transformational leadership helped facilitate both organizational commitment and employee productivity. Zwingmann *et al.,* (2014) found that employees led by a transformational leader have better health than those led by a laissez-faire (apathetic, hands-off) leader. They added that having a clear, shared vision that gives meaning to work is a "health-promoting phenomena" in the workplace. Transformational leadership has three basic functions. First, transformational leaders sincerely serve the needs of others, empower them and inspire followers to achieve great success. Secondly, they charismatically lead, set a vision, and instill trust, confidence, and pride in working with them. Finally, with intellectual stimulation, they offer followers of the same caliber as the leader (Castanheira & Costa, 2011). Transformational leadership as argued by Nhat (2016) through its constructs plays a key role in aggrandizing knowledge sharing behavior as follows:

Idealized Influence (divided into sub-dimensions of idealized attributes and idealized behavior): Transformational leaders who display behaviors of honesty, integrity,

power, and confidence, have a collective responsibility and genuine care for others, and are admired by their employees. Idealized Influence (Attribute) refers to leaders who have the ability to build trust in their followers while Idealized Influence (Behavior) refers to leaders who act with integrity (Nhat, 2016) which finally augments knowledge sharing behavior.

Inspirational Motivation: Transformational leaders inspire followers by providing meaning and challenge to the work, communicating high expectations for the group, sharing the vision, and arousing enthusiasm and optimism about the future of the organization (Nhat, 2016) which in turn escalates knowledge sharing behavior.

Intellectual Stimulation: Transformational leaders stimulate innovation and creativity of followers by promoting critical thinking to solve problems, questioning assumptions, approaching old situations in new ways, and soliciting creative ideas to problems (Nhat, 2016) which exacerbate knowledge sharing behavior.

Individual Consideration: Transformational leaders pay close attention to the individual needs of followers for achievement and growth. They act as a mentor and coach, recognizing individual abilities, aspirations, and strengths (Nhat, 2016) which in essence accentuate knowledge sharing behavior.

Chen, *et al.,* (2004) examined the relationship between leadership behaviors and knowledge sharing in professional service firms in Taiwan and the United States. The results showed transformational leadership behaviors as a significant predictor of internal knowledge sharing, and Contingent reward leadership behaviors are significantly and positively correlated with both internal and external knowledge sharing. In addition, Constant *et al.,* (1994) argued that experienced workers learned

that they should share their knowledge which was acquired from their work and training.

Barling *et al.,* (2000) conducted an exploratory study on the relationship between emotional intelligence and transformational leadership. Their results suggest that emotional intelligence is associated with three aspects of transformational leadership: idealized influence, inspirational motivation, and individualized consideration. The leaders who report exhibiting these behaviors were assumed to be more effective in the workplace. (Palmer *et al.,* 2001), administered a self-report emotional intelligence measure to 43 managers in order to evaluate the link between emotional intelligence and leadership style. They also found that there were significant relationships between selected components of transformational leadership and emotional intelligence sub-scales. Specifically, the inspirational, motivation and individualized consideration components of transformational leadership correlated with the ability to monitor emotions and the ability to manage emotions.

Leban and Zulauf (2004) in their study addresses 24 project managers and their associated projects in six organizations from varied industries, the study showed that there are a number of linkages between emotional intelligence ability, and transformational leadership. Collectively there are several empirical research studies confirming the argument that emotional intelligence is positively related to transformational leadership greatly contributing to job performance and leadership. These studies in over 200 companies and organizations worldwide suggest that about one-third of this difference is due to technical skill and cognitive ability while two-thirds is due to emotional competence (Goleman, 2010).

Li *et al.,* (2014) found transformational leadership positively influenced leader-member exchange, which in turn led to increased knowledge sharing. Other scholars also found out that transformational leadership facilitated knowledge sharing by enhancing followers' trust in a leader (Lee *et al.,* 2014). Therefore, transformational leadership drives high emotional intelligence and high knowledge sharing behavior across the leadership continuum.

Therefore in studying the three variables together, emotional intelligence, knowledge sharing behavior and transformational leadership has little been studied in universities. Many studies have been in other countries yet leadership forms part of the sharing of knowledge in universities in Kenya. Therefore an attempt by this study to triangulate the three concepts in universities in Kenya with the moderating role of transformational leadership is necessary by this study to unearth the problem.

2.8 Knowledge gap

Universities are knowledge-intensive environments and are responsible for creating, managing, and disseminating knowledge in society. They are knowledge centers established to generate and provide knowledge, and to equip people with the best education in order to serve their societies. They grow and prosper from the knowledge of their academics, staff, and students (Singer & Hurley, 2005). Accordingly to ensure success, achieve their goals (Sharma, 2010), and have constant performance improvements. Universities should promote knowledge sharing among their academics. In today's knowledge-based age, the importance of education is increasing in advancing science and technology, spreading information and knowledge, and promoting literacy. During the 19th and 20th centuries, the development of education was a critical driver for building societies (Mazzarol & Soutar, 2002).

Mahmud and Bretag (2013) acknowledge little existence of research focusing on knowledge sharing among academic staff and postgraduate students. Despite the increasing awareness during the last few years of knowledge sharing, benefits and the growing number of organizations adopting its strategies, almost none are in the higher education sector (Sallis *et al.,* 2006).. Realizing that human knowledge is doubling every 13 months on average (Schilling, 2013) definitely calls for developing knowledge sharing strategies in higher education institution is critical. Hence the keen interest by this study to investigate the issue at hand by identifying knowledge sharing behavior and further suggest possible strategies to knowledge sharing behavior in universities in Kenya. It is the intent of this study to shed light on the implications of knowledge sharing behavior in universities among academic staffs with the hope of informing the scholars, academicians, and students and hence produce centers of knowledge sharing behaviours in the society at large.

While studies have been conducted to investigate the relationship between emotional intelligence and transformational leadership in foreign countries, there is a lack of research on this issue in Kenya. Therefore, this study seeks to fill these gaps and addresses this issue. (Wambui, 2017). Nevertheless, very little empirical research investigating the knowledge sharing behavior of academic staff at higher education can be found (Cheng *et al.,* 2014), especially in Kenya. Other studies were conducted in the service industry (Mohayidin *et al.,* 2016. Further, limited and inclusive studies have linked emotional intelligence with knowledge sharing behavior of academic staff at higher education institutions.

2.9 Conceptual Framework

A conceptual framework is a system of variable relationships that are logically designed to present a systematic view of the research problem. It specifies more exactly the variables to be studied i.e. independent and dependent variables. The study intends to examine the linkage between independent variables (emotional intelligence) and dependent variables (knowledge sharing behavior).In order to examine such a linkage, a conceptual framework is presented and later, the proposition of hypotheses, figure 2.1 below illustrates the conceptual framework of the study. As the figure shows, five aspects of emotional intelligence namely, self-awareness, self-regulation, social skills, interpersonal skills, and humility is identified Goleman (2010). Further, the study assumed transformational leadership as the moderator on the relationship between emotional intelligence and knowledge sharing behavior as discussed by Zwingmann *et al.,* (2014).

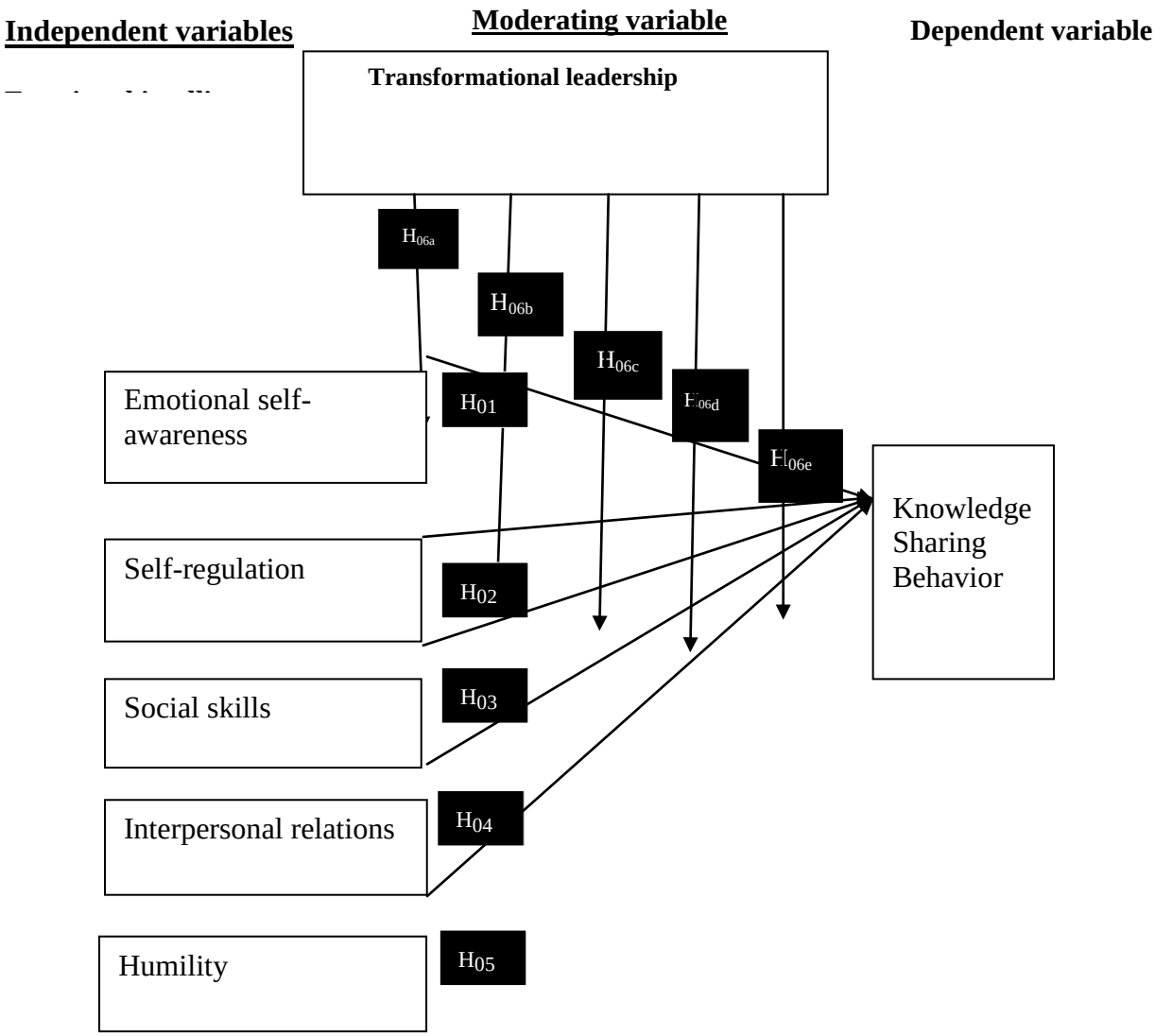

Figure 2. 4: Conceptual Framework

Source: Author, 2019

CHAPTER THREE

RESEARCH METHODOLOGY

3.0 Overview

This section highlights the philosophical basis for the study, the study design, study Area, study population, sample size, sampling design and procedure, Operationalization and measurement of variables, methods of data collection, data collection procedures, validity and reliability tests, data analysis, and ethical considerations.

3.1 Philosophical Paradigm

Research philosophy is defined as the development of the research background, knowledge and its nature (Saunders *et al.,* 2011). Philosophical concepts in research assist in specifying research design and strategy that give direction from the research questions to its conclusions (Ericksson & Kovalainen, 2015).

Most social science research is based on two main philosophical approaches, positivism and interpretivism. Positivism deals with observable phenomena which emphasize objectivism in putting forward explanations while Interpretivism, on the other hand, deals with subjectivism and is focused more on understanding rather than explaining (Saunders *et al.*, 2007).

This study emphasized on positivism while investigating the hypothesized causal explanation because the study is based on objectivity (Elshafie, 2013) where objects exist independently (Scotland 2012). Since it seeks to test hypotheses as there is no absolute truth or advance relationship between variables (Philip & Burbules, 2000). Research philosophy is positivism where knowledge is thought to exist independent

of people's perceptions of it and that science uses objective techniques to discover what exists in the world. In this study positivism was chosen because knowledge sharing behavior as pertaining academic staff can be defined objectively through the use of established theoretical frameworks and structured instruments to assess and analyze it upon which generalizations can be made from the findings.

This study followed positivism philosophy because it is quantitative and hence would produce facts that correspond to independent reality, free and prioritizes observation (Ericksson & Kovalainen, 2015). It emphasizes the idea of observation and operationalization of issues that are studied and measured as the essence of any scientific study such as this study. In the study knowledge sharing behavior which is the dependent variable was operationalized and measured in its dimensions.

3.2 Research Design

Research design can be described as a logical model of proof that allows the researcher to interpret and draw inferences concerning causal relationships of the variables under investigation (Creswell *et al.,* 2008). The independent variable of this study was Emotional Intelligence which was regressed against knowledge sharing behavior. This study employed an explanatory research design built around testing of the stated hypothesis (Hair *et al.,* 2013). An explanatory research design is a study that seeks to establish a relationship that exists between variables. Its purpose is to identify how one variable affects the other; it seeks to provide an explanation of the causes and effects of one or more variables (Saunders *et al.*, 2007).

Sekeran (2005) explains that an explanatory research study is undertaken in order to investigate the cause-effect relationship and describe the characteristics of the variables of interest in a situation by offering a profile to describe relevant aspects of the phenomenon of interest to the researcher from an individual, organizational to industry perspective. According to Saunders *et al.*, (2011) studies that establish causal relationships between variables use explanatory design. The description that the research may have used is actually a precursor to the explanation (Cresswell, 2008). This design is necessary as it is concerned with describing, recording, analyzing and interpreting relationships among variables. It is also concerned with hypothesis formulation and testing the analysis of the relationship between non-manipulated variables (Blaug, 1980).Thus this study sought to determine the effect of Emotional Intelligence on knowledge sharing behavior and to examine its relationship therefore; it is explanatory research design. These variables were respectively explained as moderated by transformational leadership. Whether, why and how there is a relationship on emotional intelligence and knowledge sharing behavior was established using this design.

3.3 The study area

The study area was Nairobi, the capital city of Kenya founded in 1899 as a railway stop from Mombasa with a population of over 3.5 million people. It's a major hub for both local and international businesses. With the new constitution Nairobi became a county of its own with many universities. According to the Commission for Higher Education (CHE), (2018), there are 49 chartered universities in Kenya and 14 in Nairobi County. Hence it provided data that was representative of the whole country. The Commission for University Education (CUE) was established under the

Universities Act, No. 42 of 2012, as the successor to the Commission for Higher Education. It is the Government agency mandated to regulate university education in Kenya.

The Commission has made great strides in ensuring the maintenance of standards, quality and relevance in all aspects of university education, training and research. The Commission continues to mainstream quality assurance practices in university education by encouraging continuous improvement in the quality of universities and programmes. The Universities Regulations, 2014 were gazette on 12th June 2014 and are currently in force. For any institutions to be accredited, the Commission must be satisfied that the institution concerned has adequate physical, human, library and financial resources, viable relevant academic programmes and sound structure of governance. As provided by the act of parliament, the president of the Republic of Kenya appoints the chancellors of public universities who are the heads of the universities (CHE, 2018).

universities in Kenya provide one of the best intellectual capital in Kenyan economy and institution involved in intelligence and knowledge sharing as top cream hub for the country thus its focus creates a sustainable competitive advantage since academic staff of universities are expert knowledge intensive workers engaged in teaching, writing, research and knowledge dissemination in different skills a prerequisite for sustainable competitive advantage. They generate value using their intellectual assets and their higher education institutions generate value by sharing knowledge. Universities as an educational and research environments are appropriate places for knowledge sharing. In fact, universities like other organizations have competitive environments, so it is necessary to make sure that it is in this environments,

knowledge is appropriately generated, transferred and shared among individuals. Faculty members are considered as primary sources of production and application in academic institutions and their major activities are teaching, researching and doing related professional activities (Seonghee & Boryung, 2008).

In the last four decades, there has been a rapid growth of the higher education sector as a whole. Demand for higher education in Kenya has attracted various universities, both public and private to open up campuses. This has been done to serve the numerous numbers of students enrolling for higher education institutions (CHE, 2018).The current state of the universities consists part of the inherited legacies from the past and policy intentions of the future. Regrettably, even though universities are knowledge service providers, many Kenyan universities were not utilizing knowledge to the fullest to improve their performance. This is because the data, information, and knowledge available in these universities are not appropriately managed when they could be efficiently shared and reused to generate new knowledge (Wambui, 2017).

3.4 Target Population

The target population comprised of 6423 academic staff from 14 chattered universities in Nairobi County main campuses only and not satellite campuses and constituents university colleges (Commission of University, 2018). This choice was informed by the highest number of chartered universities in Nairobi Kenya compared with other counties. Further, Most universities in Nairobi county have matured over time with competitive nature and with the highest rate talent wars rage as universities raid competition for staff. In addition, the researcher targeted the teaching staff members since the main function of universities is sharing of knowledge, research and community work which is formulated, implemented and monitored by them.

A population is a well-defined set of people, services, elements, and events, group of things or households with some common observable characteristics (Best and Kahn 2007). A target population refers to the entire group of objects of interest from whom the researcher seeks to obtain the relevant information for the study.

Table 3.1: Target Population

University	**No. Of Academic Staff**
1. University of Nairobi	1783
2. Kenyatta University	1702
3. Jomo Kenyatta University of Science & Technology	870
4. Technical University of Kenya	616
5. Cooperative University	60
6. Multimedia University	107
7. Catholic University of Eastern Africa (CUEA)	124
8. Daystar University	117
9. United States International University	292
10. Africa Nazarene University	65
11. Pan Africa Christian University	78
12. Strathmore University	309
13. Africa International University	150
14. KCA University	150
Total	**6423**

Source; (CUE, 2018)

3.5 Sampling Design and Procedures

Out of the targeted population of 6423, a sample size of 376 academic staff was chosen. This was considered satisfactory for an explanatory research design. A sample of between 400 and 500 is deemed very good for an explanatory design (Zikmund *et al.,* 2013). The study used stratified technique to select the university's academic staff into 14 strata's representing each university in Nairobi County, Kenya. Since stratified sampling technique identifies sub groups in a population into separate heterogeneous subsets for example the academic staff fall into different sub scales in

the university that share similar functional characteristics. Thereafter**,** the respondents to the questionnaire were picked using simple random sampling. This was done by assigning a consecutive number from one (1) to N^{th} number for each stratum where pre-specified size, is drawn independently in different strata. For example for university of Nairobi, in the study it was assigned a consecutive number from one (1) to 1783. The data containing the 1783 names of academic staff was then input into SPSS, and a random sample of 106 out of 1783 was randomly selected.

3.5.1 Sample Size

Sample size is a function of change in the population parameters under study and the estimation of the quality that is needed by the study (Wegner, 2000). From the target population of 6423, Taro Yammane (1973) sample size formula was used to select a sample size of 376 academic staff as shown;

$$n = \frac{N}{1 + N(e)^2}$$

$$376 = \frac{6423}{1 + 6423\ (0.05)^2}$$

Where n=sample size,

N=population size,

e= the error of sampling.

3.5.2 Proportionate sample size

In this approach, each stratum sample size is directly proportional to the population size of the entire population of strata. That means each strata sample has the same sampling fraction. This was done using Neyman allocation formula (1934). The purpose of the method is to maximize survey precision, given a fixed sample size. With Neyman allocation, the best sample size for stratum h would be:

$$n_h = \left(\frac{N_h}{N}\right) n$$

Where,

n_h - The sample size for stratum h,

n- Total sample size,

N_h- The population size for stratum h,

N- The total population

Hence, distribution will be as follows;

Hence, distribution will be as follows;

Table 3. 2: Sample Size per university

		No. Of Academic Staff	sample of academic staff
1	University of Nairobi	1783	106
2	Kenyatta University	1702	101
3	Jomo Kenyatta University of Science Technology	870	46
4	Technical University of Kenya	616	37
5	Cooperate University	60	4
6	Multimedia University	107	6
7	Catholic University of Eastern Africa (CUEA)	124	7
8	Daystar University	117	7
9	United States International University	292	17
10	Africa Nazarene University	65	4
11	Pan Africa Christian University 2008	78	5
12	Strathmore University 2008	309	18
13	Africa International University	150	9
14	KCA University	150	9
	Total	**6423**	**376**

The respondents were selected using simple random sampling.

3.5.3 Unit of Analysis

According to Neuman (2007), Unit of analysis refers to the type of unit a researcher uses when measuring (see also, Hair *et al.*, 2013). In this study, the unit of analysis was the academic staff serving in universities in Kenya. The unit of analysis for this

study was chattered universities in Kenya Nairobi County main campuses only obtained from the commission for university education database (CHE 2018). It was chosen because academic staff of universities are expert knowledge intensive workers engaged in teaching, writing, research and knowledge dissemination in different skills a prerequisite for sustainable competitive advantage. They generate value using their intellectual assets and their higher education institutions generate value by sharing knowledge. Universities as an educational and research environment are appropriate places for knowledge sharing. Thus it's an appropriate representative sample of the entire population and free from bias.

3.6 Data Collection instruments and procedures

Primary data was collected using a questionnaire. The sample size in table 3.2 reveal the number of questionnaires that were distributed to the respondents in the universities in Kenya.

3.6.1 Data Collection Instruments

A self-administered questionnaire is a data collection tool in which written questions are presented that are to be answered by the respondents in written form (Hair et. al., 2013). For purposes of this study, the instrument for collecting data was a questionnaire. The questionnaires were used as data collection instrument in order to enable the researcher to achieve the stated objectives in collecting primary data based on the five-point Likert-type scales by answering specific research questions.

Structured questions were used in order to motivate the respondents and save time. The justification for using the questionnaire as a data collection instrument is hinged on a number of factors; firstly, questionnaires are cheap and quick to administer.

Also, it is highly convenient for the respondents as they could fill them during free time and is convenient for assessing perceptual studies (Hair *et. al.,* 2013).

3.6.2 Data Collection procedures

The collection of data was conducted by the researcher. The actual process of collecting data entailed the researcher issuing the questionnaires to the target respondents. The respondents were then given time to fill in the questionnaires by way of ticking respective responses that are reflective of his/her opinion about the various statements in the questionnaire (Saunders *et al.,* 2007). The filled questionnaires were collected back by the researcher ready to be processed and analyzed. Where a respondent is not in a position to fill the questionnaire tool on the spot, he/she was allowed time to fill it at his own convenient time within the span of one month. To encourage respondents to return faster filled questionnaires and reminders in the form of phone calls and physical repeat visits.

3.6.3 Nature of data

The study made use of primary data. Kothari (2004) describes primary data as those data which are collected for the first time, and thus happen to be original in nature. Louis, *et al.,* (2010) describes primary data as original items to the problem under study while ember and ember (2011) describes primary data as data collected by the researcher in various fields explicitly for comparative study. While Dawson (2009) states that secondary research data involves the data collected using information from studies that other researchers have made of a subject.

3.6.4 Sources of Litarature

3.6.4.1 Primary Sources

The primary sources are those which are collected afresh and for the first time, and thus happen to be original in character. The primary data are originally collected. Primary sources of data came from the field by using questionnaires conducted by the researcher

3.6.4.2 Secondary Sources

Secondary sources came from books, internet, newspapers and other sources of information. Secondary data are easily available and organized therefore analysis and interpretation using secondary data can easily be done. Secondary data may be either published or unpublished data (Kothari, 2008).

3.6.5 Data Transformation

Likert scale data was treated as interval by using a summated scale and analyzed using average scores for all items in each variables Boone & Boone (2012).Creswell (2008) suggests that for likert data to be treated as an interval it must be developed into categories within the scale, to establish average scores between each value on the scale and normality of the data.

3.7 Reliability and Validity

Reliability means dependability or consistency and its measures of the degree to which a research instrument yields consistent data after repeated trials (Hair *et al.,* 2013). While validity refers to the ability of a scale or measuring instrument to measure what is intended to be measured (Zikmund, *et al.,* 2010).

3.7.1 Pilot test

Before the questionnaires were finally administered to participants, pre-testing was carried out to ascertain the relevance, clarity and accuracy of the question items. Essentially, endeavors to determine the reliability of research tools in terms of wording, structure and sequence of the items. In this study research instrument was tested on 10% of the total sample size from academic staff in Moi University. This translated to thirty seven respondents. Research scholars contend that pilot studies can save tremendous amount of time and money if properly done. (Saunders *et al.,* 2009). Saunders *et al.,* 2009 considers reliability as the degree to which a study's data collection methods process yield consistent findings, and whether there is transparency in derivation of meaning from raw data.

3.7.2 Reliability Test

Reliability of this study was determined by using adopted validated scales from past research and Cronbach Alpha test (Saunders, *et al.,* 2007) and those items that were found to have an alpha coefficient of 0.7 and above were accepted (Fraenkel & Wallen, 2000). The adoption of an instrument established with high reliability was used and performed on the questionnaire items using Cronbach alpha. However, the threshold that is acceptable in most related research is 0.7 thresholds (Fraenkel & Wallen, 2000) and which guided this study. In this study reliability results was attained since all the variables had more that 0.7 (see 4.15)

3.7.3 Validity Test

Validity refers to the extent to which a research instrument measures what it was intended to measure (Zikmund *et al.,* 2010). This study addressed the two approaches

to establish validity i.e content validity and construct validity. Validity is concerned with whether the findings are really what they appear to be about. Validity of the research instruments was pretested for validity. This study also addressed face, content and construct validity (Zikmund *et al.*, 2010).

3.7.3.1 Content validity

To establish content validity this research was validated by determining the variables which have been defined and used in the literature previously. The items used in this study were adopted based on an extensive review of literature as suggested by Hair et al. (2010), the questionnaire was also piloted on some of the participants to make sure questions were clear and understandable. Additionally, opinions from experts were sought to provide relevant inputs adding to what had been identified from the literature. Piloting questionnaires also assisted in highlighting ambiguities and other potential pitfalls (Somekh and Lewin, 2005). The objective of checking content validity is to ensure that the selection of scale items extends past just empirical issues to also include theoretical and practical considerations (Hair et al., 2010).

3.7.3.2 Construct validity

Construct validity which is the degree to which a test measures what it claims, or purports, to be measuring or the appropriateness of inferences made on the basis of observations or measurements (often test scores), specifically whether a test measures the intended construct. Wieland et al. (2017). In order to assess the construct validity, scale items were examined by principal components extraction with varimax rotation. The Kaiser-Meyer-Olkin (KMO), The Bartlett's test, is significant in this study and confirms the appropriateness of the factor analysis for the data set.

3.7.3.3 Face validity

Face validity was measured by inspecting the concepts studied for their appropriateness to logically appear to reflect what it was intended to be measured.to establish content validity, the variables under study were identified from past literature and diverse conceptualizations from extant literature were conducted.

3.8 Measurements of Variables

Study variables were operationalized and measured using already established study items from existing literature and where necessary, adaptations were made to fit the uniqueness of the study by making them context-specific. All the variables were measured using five point likert scale. According to Zikmund *et al.,* (2013) likert scales with five point or more were desirable than those that were shorter because they offered more variance, more sensitive and had a higher degree of measurement and information.

3.8.1 Measurements for the dependent and Independent Variable

In this research, Emotional intelligence which is the independent variable (IV) was measured using the Wong and Law Emotional Intelligence Scale that comprises of 16 items (WLEIS; Law *et al.,* 2004). While Knowledge sharing behavior which is the dependent variable (DV) was measured by the knowledge sharing scale by (Kankanhalli *et al.,* 2005) which comprises of eight items will be adopted.

3.8.2 Measurements for the Moderator Variable

Transformational leadership was measured by (Ismail and Yusuf, 2013) scale which contains five items scale designed for diverse aspects of transformational leadership.

3.9 Data Processing and Analysis

The collected data from the field was entered in SPSS (Statistical Package for Social Scientists) version 22, cleaned and inspected for preliminary assumptions and then further subjected to statistical analysis using descriptive and inferential statistics. Data analysis was guided by the research objectives and research hypothesis of the study.

3.9.1 Data Processing and Screening

Data for this study was inspected and edited for completeness. In addition coding was done involving assigning numerical symbols for quick data entry and to minimize errors and to facilitate further analysis was done. Each item in the questionnaire was coded and entered into SPSS software. Also checking and cleaning of data which involved checking for inconsistencies, and missing responses to ensure accuracy and completeness was ensured. In this study, accuracy was maintained during data coding and entry. Data was also processed by checking on outliers and in order to minimize outliers the study ensured correctness and accuracy of data entry. In line with the recommendations of Tabachnick and Fidell (2013) used Mahalanobis D^2 to identify and deal with multivariate outliers that also catered for uni-variate outliers.

Once the pre-coded questionnaires were collected by the researcher and keyed in. Factor analysis was done to reduce the items of the questionnaires that were not valid and reliable with the constructs. Descriptive statistics such as mean, standard deviations, reliability coefficients, and inter-correlations were computed to understand the variability and interdependence of the subscales derived from the factor analysis According to Hair *et al.*, (2013), missing values was replaced using the mean statistic in line with the suggestion of (Hair *et al.*, 2013), Outliers are points that are far from

observing other observations. Outliers may be due to variation in the measurement and can perhaps show an experimental error. In this study, outliers was reduced by using linear regression methods.

3.10 Data Analysis

3.10.1 Descriptive Statistics

Descriptive analysis was used to describe the demographic profile of the target respondents inform of frequencies, percentages, tables, central tendencies e.g. mean and standard deviation. The demographic profiles consisted of the level of experience, education attained, gender, and age of the respondents.

3.10.2 Factor Analysis

Factor analysis was done for this study so as to identify the latent variables in the data constructs and to prepare it for regression (Idinga, 2015). In order to do factor analysis for knowledge sharing behavior and the other variables, the analysis requirements were assessed. Hence exploratory factor analysis was conducted for all items used to measure independent variables (self-awareness, self-regulation, social skills, interpersonal skills and humility), the moderator variable (transformational leadership) and the dependent variable (knowledge sharing behavior).Data was first assessed for its suitability with regard to its sample size and the strength of the relationship among variables or items. Factorability of the data was assessed using Bartlets test of sphericity and Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Bartlets test of sphericity should be statistically significant at $p<0.05$, KMO index should range from 0 to 1.factor extraction was done using principal

component analysis (PCA) where factors with Eigen values greater than 1 were chosen.

3.10.3 Correlation Analysis

Correlation analysis for this study was done to establish whether there was an association between variables of interest. The values of the correlation coefficients vary from a value of +1.00 to a value of -1.00 which represents extremely perfect relationships. When independent variables are highly correlated, it becomes difficult to establish the effect of each independent variable on the dependent variable (Hair *et al.,* 2013). Thus this study employed Pearson Product Moment correlation to test the association between the independent variables (self-awareness, self-regulation, social skills, interpersonal skills and humility) and the dependent variable (knowledge sharing behavior) was examined using Pearson Product Moment correlation analysis.

3.10.4 Regression analysis

Multiple regression technique was used to show the amount of variations explained by the independent variables on the dependent variable through the coefficient of determination (R^2). Hypothesis testing was done using a moderated multiple and hierarchical moderated analysis.

3.10.5 Analytical model

This involved the conceptualization of the multiple and moderated regression model to analyze the moderating effect of transformational leadership on the relationship between emotional intelligence among academic staff in universities in Kenya. Regression of the outcome variable, which is the knowledge sharing behavior, with respect to the independent variables self-awareness, self-regulation, social skills,

interpersonal skills and humility was conducted. This produced a model for prediction. Hence multiple regression analysis was used to analyze data for this study. R^2, the coefficient of determination provided a measure of the predictive ability of the model. The equation was:

$$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \varepsilon$$

……..General model

Where;

$X_{1:}$ Represents emotional self-awareness

$X_{2:}$ Represents Self-regulation

$X_{3:}$ Represents social skills

$X_{4:}$ Represents interpersonal relations

$X_{5:}$ humility

Y: Represents the dependent variable (knowledge sharing behavior)

β_0 is a constant representing the Y-intercept

'β_1' to 'β_5': Represent the effect of slope coefficients denoting the influence of the associated independent variables over the dependent variable.

ε: Represent the error term

3.11 Moderated regression

In line with the recommendations of Hayes (2012), Hierarchical multiple regression analysis was used to test the moderating effect of transformational leadership on emotional intelligence and knowledge sharing behavior. Hierarchical moderated regression was used because it would show how the prediction of the independent variables, a moderator, and interactions of the independent variables and a moderator improves the prediction (Leech *et al.,* 2011). The moderated regression equation was:

$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \varepsilon$ ……..…MODEL 1

$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 m + \varepsilon_2$ ……..…….MODEL 2

$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 m + \beta_7 x_1 * m + \varepsilon_3$ ……..MODEL 3

$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 m + \beta_7 x_1 * m + \beta_8 x_2 * m +$

ε_4 ……. MODEL 4

$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 m + \beta_7 x_1 * m + \beta_8 x_2 * m + \beta_9 x_3 *$

$m + \varepsilon_5$ …….. MODEL 5

$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 m + \beta_7 x_1 * m + \beta_8 x_2 * m + \beta_9 x_3 *$

$m + \beta_{10} x_4 * m + \varepsilon_6$ ……MODEL 6

$Y = \beta_0 + \beta_1 x_1 + \beta_2 x_2 + \beta_3 x_3 + \beta_4 x_4 + \beta_5 x_5 + \beta_6 m + \beta_7 x_1 * m + \beta_8 x_2 * m + \beta_9 x_3 *$

$m + \beta_{10} x_4 * m + \beta_{11} x_5 * m + \varepsilon_7$ ……MODEL 7

$X_{1:}$ Represents emotional self-awareness.

$X_{2:}$ Represents Self-regulation

$X_{3:}$ Represents social skills

$X_{4:}$ Represents interpersonal relations

$X_{5:}$ Humility

Y: Represents the dependent variable (knowledge sharing behavior)

m: Represents the Moderator variable, Transformational leadership

$\varepsilon_1 - \varepsilon_7$ Represents the error terms

$\beta_{0:}$ Is a constant representing the Y intercept

$\beta_1 - \beta_{11}$ Are the parameters (coefficient of estimates)

3.11.1 Hypothesis Testing

Multiple regression analysis is used to predict the value of dependable variable based on the value of two or more independent variables, while hierarchical regression was used to test moderating effect. The study hypotheses were therefore tested using

multiple regression and hierarchical regression analysis where the significant level was set at 0.05. The null hypotheses were either rejected at $p<0.05$ level, otherwise fail to reject at $p>0.05$ level.

3.11.2 Assumptions of Regression Model

Most statistical tests rely upon certain assumptions about the variables used in the analysis. When these assumptions have not met the results may not be trustworthy, resulting in a Type I or Type II error, or over or underestimation of significance or effect size(s). As Pedhazur (1997, p. 33) notes, "Knowledge and understanding of the situations when violations of assumptions lead to serious biases, and when they are of little consequence, are essential to meaningful data analysis". These assumptions are explained as follows:

3.11.2 Normality

Saunders *et al.*, (2007) extends that normality test is used to determine whether the data sets are normally distributed. Normality holds that the distribution of the test is bell-shaped with 0 (zero) mean, with 1 (one) standard deviation and a symmetric bell-shaped curve. It is assumed that the residuals of variables are normally distributed. That is, the errors in the prediction of value Y (the dependent variable) are distributed in a way that approaches the normal curve. The assumption of normality was especially critical when constructing reference intervals for variables and when this assumption does not hold, it is impossible to draw accurate and reliable conclusions about reality (Ghasemi & Zahediasl, 2012).

This study tested normality using Kolmogorov-Smirnov test. The Kolmogorov Smirnov (K-S) tests the assumption that the sample data are drawn from a normally

distributed population. It tests the null hypothesis that the data come from a normally distributed population and the alternate hypothesis that the data come from a population that is not normally distributed. If the results of the test are significant that is $p<0.05$ then rejecting the null hypothesis means rejecting the assumption of normality for the distribution (Field, 2009).

3.11.3 Linearity

This was tested by creating a scatter plot using SPSS Statistics where the researcher plotted the dependent variable against the independent variable and then visually inspect the scatter plot to check for linearity. Were the relationship displayed in the scatter plot is not linear, the transformation of the data will be done. Also, the t-Test will be used to examine whether there is some significant linear relationship between the independent and dependent variables or not (Kothari & Garg, 2014). The decision about the null hypothesis in a two-tailed test will be taken by comparing the computed value and critical value of t distribution. The decision criteria will be that the null hypothesis is rejected at α x 100% level of significance when the computed value and critical value is lower than $-t\alpha/2$ or larger than $t\alpha/2$. Rejecting a null hypothesis means there is a significant linear relationship between the variables (Kothari & Garg, 2014).

3.11.4 Homoscedasticity

In this study heteroscedasticity was minimized or eliminated where possible by ensuring that the data used in hypothesis testing is approximately normal and is accurately transformed and that the right functional forms of regression model are selected and variables presented by scatter plot diagrams of the dependent variable (DV) will widen or narrow as the value of the independent variable (IV) increases. The inverse of heteroscedasticity is homoscedasticity which indicates that a DV's

variability is equal across values of an IV. At each level of the predictor variables(s), the variance of the residual terms should be constant.

This was be tested using qq plots (Schutzenmeister, *et al.,* 2012). A Q–Q (quantile-quantile) plot is a type of graphical probability plot applicable in testing heteroscedasticity besides the test for normality. The researcher observed the spread location and in case the plot shows that the residuals are spread equally along with the ranges of predictors, then this will indicate that the data will be deduced to be homoscedastic. However if data is found to be spread unequally along with the range of the predictors, then it will heteroscedastic and thus will be subjected to transformation using methods like logs and or Z scores.

3.11.5 Multicollinearity

Multicollinearity refers to the relationship between two or more exogenous variables, where the independent variables demonstrate little correlation with other independent variables Hair Jr et al. (2010). Multicollinearity will be dealt with by first establishing the inter-correlations between the independent variables and those correlations of 0.9 and higher will be seen as good candidates for deletion (Tabachnick *et al.,* 2002). Multicollinearity problem occurs when the independent variables are highly correlated to each other (Hair *et al.,* 2010).

Therefore, when two or more variables are highly related, it means they contain unnecessary information. For this study multicollinearity was be tested statistically by use of the VIF (Variance Inflation Factor) was conducted. The VIF for a predictor indicates whether there is a strong linear association between itself and all the remaining predictors. VIF is a reciprocal of the tolerance. Larger VIF greater than 10

will be indicative of Multicollinearity (Stevens 2002). However, the most reliable statistical test of multicollinearity is an examination of tolerance and Variance Inflation Factor (VIF) with the thresholds of more than 0.1 and VIF of 10 (Hairr *et al.,* 2010). multicollinearity was tested through the examination of tolerance and VIF using regression results provided by the SPSS collinearity diagnostics result.

3.11.6 Independence of errors

The Durbin-Watson statistic will be obtained to examine the independence of errors. The assumption of independence is given by $D = \frac{\sum_{i=2}^{n}(e_i - e_{i-1})^2}{\sum_{i=2}^{n} e_i^2}$ where $e_i = y_i - a - bx_i$ $(i = 1, 2 \ldots., n)$ are residuals. A value of D between 1 and 3 is usually considered to be accepted (Kothari & Garg, 2014). Serial correlation will be tested using Durbin Watson test.

3.12 Limitations of the study

Majorly the study was based on the academic staff of universities in the public and private universities in Kenya and may therefore be limited in terms of external validity and generalizability. The study findings may be limited by generalization across populations of opportunities.

Like most empirical research, the findings of this study are based on information generated from the academic staff limited by time frame available for the study, only 376 questionnaires were administered. Convincing academic staff to answer questionnaires was rather challenging as some of them claim they are busy and therefore do not have time. Besides some did not respond to the questionnaires and therefore have to exclude from the data

Some respondents might have deliberately withheld some vital information due to bureaucracy and secrecy upheld in many universities. The other limitation of this study arose from the nature of its dyadic responses. Particularly the academic staff may not have been quite objective in their evaluation considering their proximity with their leaders and institutions in their daily service.

Despite those challenges, the findings from the study were valid and would be of great benefit to .the academic staff and concerned universities.

3.13 Ethical considerations

The major ethical concern which was considered important included; consent, confidentiality and privacy. The respondents were provided with adequate information concerning the study. The researcher explained to the respondents that participating in the study was voluntary and that they were free to withdraw from it at any time they deem fit. Informed consent of each participant was sought by the researcher before their participation.

The privacy of the participants was assured by not identifying the individual responses and keeping the questionnaires and data under lock and key accessed by the researcher alone. There was no harm to the respondents because the study was not practical in nature.to avoid deception the researcher identified himself with the respondents by sharing his contact details in case of any queries. Also clarity was provided on the nature of the research and procedures, and they were allowed to ask questions before, during and at the end of the study. No one was coerced to respond and the respondents were also guaranteed protection through anonymity and by keeping the information given confidential and if there was going to be need for

disclosure their consent was sought. All the respondents were treated with respect and equality.

To obtain access to the universities, a letter seeking permission to conduct the study from the National Commission for Science, Technology and innovation (NACOSTI) was submitted to the Universities. This letter was accompanied with an introduction letter from Moi University with a copy of the questionnaire with a cover page explaining the importance of the study and expected findings.

The study undertaken to bear in mind all the ethical concerns and attempted to uphold them. Permission to carry out the research will be sought from the relevant authorities and participants. Confidentiality, anonymity and the researcher's responsibility will be maintained Hair *et al.*, (2013).

CHAPTER FOUR

DATA ANALYSIS, PRESENTATION, AND DISCUSSION

4.0 Overview

This chapter presents the results of data analysis for the following; response rate, data screening, and descriptive statistics for the study variables, reliability tests, factor analysis, data diagnostics statistics, correlation statistics and test of hypothesis using multiple and moderated regression model and their interpretations presented.

4.1 Response Rate

The study was intended to collect data from 376 respondents, but data was successfully collected from 337 respondents. This represents a response rate of 89.62 percent of the entire sample, of which 39 were further discarded for either lack of response or being improperly filled. This response falls within the confines of a large sample size Anderson *et al.,* (2003) as presented in table 4.1. Further, Babbie (2007) asserts that a response rate of 60 percent is good, 70 percent is very good and above 80 percent is excellent for a study.

Table 4. 1: Response Rate

	Universities Academic staff	
Sample size	**Number**	**Percentage**
Usable responses	337	89.62
Unusable responses	39	10.38
Total sample size responses	376	100

Source: Research Data (2019)

4.2 Data Preparation and Screening

Data Screening was conducted in order to establish whether among others, data accurately reflected the responses made by the respondents, whether all the data were in place and accounted for, whether there was a pattern to the missing data, whether there were any unusual or extreme responses present in the data set that could distort understanding of the phenomena under study, and whether the data met the statistical assumptions that underlie multiple regression. Consequently, data was screened for response rate, missing values, outliers, normality, linearity and homoscedasticity.

4.2.1 Missing Values Analysis

Missing data is referring to unavailability of suitable value on one or more variables for data analysis (Hair *et al*, 2010). In view of the negative consequences of missing data in the analysis, the researcher took precautionary action right from the field in an attempt at reducing or ensuring that the data was free from any missing values. On receipt of any duly completed questionnaire, the researcher quickly checked through to ensure that each and every question was appropriately answered. Additionally, the researcher followed the data entry step by step, with a lot of caution. As the data was received the researcher took enough time in inputting it into the SPSS software. A preliminary descriptive statistics was then conducted to find out whether there was missing data or not. The descriptive statistics result shows that no missing values was recorded, hence, no deletion. Hair *et al*. (2010) asserts that any case with more than 50% missing value should be deleted as long as there is adequate sample. Similarly, Tabachnich and Fiddel (2007) and Babbie (2005) observed the method of treating missing data was to merely drop the case. Hence, in this study no missing values was recorded.

4.2.2 Analysis of Outliers

An outlier is a point that is far from observing other observations. Scrutinizing outliers is an important step before analysis in order to statistically test for problematic outliers. In line with the recommendations of Tabachnick and Fidell (2013), this study used Mahalanobis D^2 measure to identify and deal with multivariate outliers as shown in table 4.2. Handling multivariate outliers would take care of univariate outliers. However, treating univariate outliers would not necessarily take care of multivariate outliers (Hair *et al.,* 2010). Hence Mahalanobis D^2 was calculated using linear regression methods in SPSS followed by the computation of the chi-square value. Given that 5 items were used, 4 represent the degree of freedom in the chi-square table with $p<0.001$ Tabachnick and Fidell (2013).This means that any case with a probability Mahalanobis D^2 value of less than 0.001 is a multivariate outlier and should be removed. Therefore, cases with a value of less than 0.001 were excluded from further analysis.

Table 4. 2: Mahalanobis Distance

	Minimum	Maximum	Mean	Std. Deviation	N
Mahal. Distance	0.533	3.589	3.982	2.628	337

a Dependent Variable: KSB

Source: Research Data, (2019)

4.3 Profile of the Respondents

The researcher sought to establish the demographic information of the respondents paying close attention to their age, gender, length of job tenure, Level of education, Job scale in the university, and finally Leadership responsibility at the university. The analysis of the background information of the respondents is critical in assessing confounders that might have a significant impact on the direction of the phenomenon

under investigation. The profile of the responents in the findings were presented in Table 4.3. The study considered the age bracket of the respondents. In terms of the age of the employees19.9% are below 30yrs, (31.2%) between 31 to 40 years, 29.4% are in the 41 to 50 age brackets, 16.3% are between 51 to 60 years while 3.4% of the employees are over 60 years of age. From the results, 50.1% of the respondents were male, and 49.9% of them were female. The results indicate that there is an almost equal representation of both male and female employees though male employees comprise the majority. Since both male and female individuals are given a chance to share their knowledge, the outcome for the organisation is likely to be greater. Furthermore, 20.5% of the respondent's job tenure was 5 years or less, 33.5% was between 6-10 years, 32.3% was between 11-15 years, 9.5% was between 16-20 years and 4.2% was more than 20 years. It is evident that the employees possess the requisite skills to perform their duties effectively. As such, the employees' job experience is part of the organisations' human capital.

The study revealed that majority of the respondents (8%) undergraduate Degree, followed by Master's Degree (34.1%). Doctorate degrees were 47.8% while those with post-doctoral degree were 10.1%. . It is evident that the employees possess the requisite skills to perform their duties effectively. As such, the employees' educational attainment is part of the organisations' human capital. For the job scale in the University 16.6% of the employees were graduate employees, 20.8% were tutorial fellows, 27% were lecturers and 24.6% were senior lecturers, 6.5% were professors, and 4.5% were associate professors,. The implication is that the employees possess the required skills to give reliable information about the study problem.

Finally, 25.9% had no leadership responsibility at the University, 27.9% of the employees were coordinators, 23.1% were head of department, 9.2% were deans and 4.5% were directors, 3.6% were principals, 1.8% were deputy principals, 2.7% were deputy vice chancellors and 1.5% were vice chancellors.

Table 4. 3: Demographic Profile of Respondents

Variables		Frequency	Percent
Age bracket	Below 30yrs	67	19.9
	31-40yrs	105	31.2
	41-50yrs	99	29.4
	51-60yrs	55	16.3
	Above 60yrs	11	3.4
	Total	337	100
Gender	Male	169	50.1
	Female	168	49.9
	Total	337	100
Job tenure	5yrs or less	69	20.5
	6-10yrs	113	33.5
	11-15yrs	109	32.3
	16-20yrs	32	9.5
	More than 20yrs	14	4.2
	Total	337	100
Level of education	Undergraduate degree	27	8
	Master's degree	115	34.1
	Doctorate degree	161	47.8
	Post-doctoral degree	34	10.1
	Total	337	100
Job scale in the university	Graduate assistant	56	16.6
	Tutorial fellow	70	20.8
	Lecturer	91	27
	Senior lecturer	83	24.6
	Associate professor	22	6.5
	Professor	15	4.5
	Total	337	100
Leadership responsibility at the university	None	87	25.
	Coordinator	94	27.9
	Head of the department	78	23.1
	Dean	31	9.2
	Director	15	4.5
	Principal	12	3.6
	Deputy principal	6	1.8
	Deputy vice chancellor	9	2.7
	Vice chancellor	5	1.5
	Total	337	100

Source: Research Data (2019)

4.4 Demographic statistical analysis Differences against Knowledge Sharing Behaviour, Emotional Intelligence and Transformational Leadership

The main demographic variables discussed in the study were: age, gender, job tenure, level of education, scale of the job and leadership responsibility at the university as discussed below:

4.4.1 Age differences on Knowledge Sharing Behaviour, Emotional Intelligence and Transformational Leadership

The results presented in Table 4.4 shows that employees below 30 years had the highest mean in Knowledge Sharing Behaviour (KSB) with a mean (M=4.26) while 41-50 years had the lowest with mean of (M=3.23).To find out if there is a significant difference between Knowledge Sharing Behaviour and age difference, a one-way analysis of variance (ANOVA) was performed. The results showed that there was a statistically significant difference between Knowledge Sharing Behaviour and age difference (F = 8.70, ρ= .00). This shows that Knowledge Sharing Behaviour is dependent on employee's age.

Similarly, the results shows that below 30 years had the highest mean in Self-awareness with a mean (M=4.04) while 51-60 years had the lowest with mean of (M=3.43).To find out if there is a significant difference between Self-awareness and age difference, a one-way analysis of variance (ANOVA) was performed. The results showed that there was a statistically significant difference between Self-awareness and age difference (F = 8.73, ρ= .00). Therefore, age has an influence on employee's self-awareness.

Further the results shows that above 60 years had the highest mean in Self-regulation with a mean (M=4.07) while below 30 years had the lowest with mean of

(M=3.46).To find out if there is a significant difference between Self-regulation and age difference, a one-way analysis of variance (ANOVA) was performed. The results showed that there was a statistically significant difference between Self-regulation and age difference (F = 3.74, ρ= .01).This shows that Self-regulation is dependent on employee's age.

The results shows that above 60 years had the highest mean in Social skill with a mean (M=4.40) while 51-60 years had the lowest with mean of (M=3.22).To find out if there is a significant difference between Social skill and age difference, a one-way analysis of variance (ANOVA) was performed. The results showed that there was a statistically significant difference between Social skill and age difference (F = 13.51, ρ= .00). Therefore, age has an influence on employee's Social skill.

Furthermore, the results shows that below 30 years and between 41-50 years had the highest mean in Self- Interpersonal skills with a mean (M=3.96) while above 60 years had the lowest with mean of (M=3.00).To find out if there is a significant difference between Interpersonal skills and age difference, a one-way analysis of variance (ANOVA) was performed. The results showed that there was a statistically significant difference between Interpersonal skills and age difference (F = 5.90, ρ= .00). Therefore, age has an influence on employee's Interpersonal skills.

Further the results shows that between 31-40 years had the highest mean in humility with a mean (M=3.89) while between 51-60 years had the lowest with mean of (M=3.39).To find out if there is a significant difference between humility and age difference, a one-way analysis of variance (ANOVA) was performed. The results showed that there was a statistically significant difference between humility and age

difference (F = 5.88, ρ= .00).This shows that humility is dependent on employee's age.

Table 4. 4: ANOVA for Age differences on Knowledge Sharing Behaviour, Emotional Intelligence and Transformational Leadership

		Descriptive statistics		ANOVA	
		Mean	Std. Deviation	F	Sig.
KSB	below 30yrs	4.26	0.62	8.70	0.00
	31-40yrs	4.35	0.52		
	41-50yrs	3.23	0.70		
	51-60yrs	3.91	0.62		
	above 60yrs	3.47	0.54		
Self-awareness	below 30yrs	4.04	0.40	8.73	0.00
	31-40yrs	3.95	0.63		
	41-50yrs	3.70	0.68		
	51-60yrs	3.43	0.91		
	above 60yrs	3.96	0.46		
Self-regulation	below 30yrs	3.46	0.59	3.74	0.01
	31-40yrs	3.84	0.69		
	41-50yrs	3.60	0.76		
	51-60yrs	3.67	0.95		
	above 60yrs	4.07	0.48		
Social skill	below 30yrs	3.81	0.67	13.51	0.00
	31-40yrs	3.61	0.64		
	41-50yrs	4.00	0.60		
	51-60yrs	3.22	1.12		
	above 60yrs	4.40	0.28		
Interpersonal skills	below 30yrs	3.96	0.42	5.90	0.00
	31-40yrs	3.83	0.84		
	41-50yrs	3.96	0.61		
	51-60yrs	3.62	0.98		
	above 60yrs	3.00	0.76		
Humility	below 30yrs	3.74	0.75	5.88	0.00
	31-40yrs	3.89	0.60		
	41-50yrs	3.82	0.57		
	51-60yrs	3.39	0.74		
	above 60yrs	3.77	0.41		
Leadership	below 30yrs	4.24	0.50	10.51	0.00
	31-40yrs	3.78	0.83		
	41-50yrs	4.04	0.76		
	51-60yrs	3.71	0.73		
	above 60yrs	2.98	0.64		
	Total	3.91	0.77		

Source: Research Data (2019)

Finally, the results shows that below 30 years had the highest mean in leadership with a mean (M=4.24) while above 60 years had the lowest with mean of (M=2.98).To find out if there is a significant difference between leadership and age difference, a one-way analysis of variance (ANOVA) was performed. The results showed that there was a statistically significant difference between leadership and age difference (F = 10.51, ρ= .00). Therefore, age has an influence on employee's leadership.

4.4.2 Gender differences on Knowledge Sharing Behaviour, Emotional Intelligence and Transformational Leadership

The results presented in Table 4.5 shows that male had the highest mean in Knowledge Sharing Behaviour (KSB) with a mean (M=4.25) compared to female with mean of (M=4.15).To find out if there is a significant difference between Knowledge Sharing Behaviour and employee gender, a one-way analysis of variance (ANOVA) was performed. The results showed that there was no statistically significant difference between Knowledge Sharing Behaviour and employee gender (F = 1.93, ρ= .17). This shows that Knowledge Sharing Behaviour is not dependent on employee's gender.

The results shows that female had the highest mean in Self-awareness with a mean (M= 3.87) compared to male with mean of (M=3.75).To find out if there is a significant difference between Self-awareness and employee gender, a one-way analysis of variance (ANOVA) was performed. The results showed that there was no statistically significant difference between Self-awareness and employee gender (F = 2.27, ρ= .13). Therefore, gender has no influence on employee's self-awareness.

Further the results shows that female had the highest mean in Self-regulation with a mean (M=3.78) compared to male with mean of (M=3.57).To find out if there is a

significant difference between Self-regulation and employee gender, a one-way analysis of variance (ANOVA) was performed. The results showed that there was a statistically significant difference between Self-regulation and employee gender (F = 6.81, ρ= .01).This shows that Self-regulation is dependent on employee's gender.

The results shows that male had the highest mean in Social skill with a mean (M=3.77) compared to female with mean of (M=3.68).To find out if there is a significant difference between Social skill and employee gender, a one-way analysis of variance (ANOVA) was performed. The results showed that there was no statistically significant difference between Social skill and employee gender (F = 1.13, ρ= .29). Therefore, employee gender has no influence on employee's Social skill.

The results also shows that female had the highest mean in Self- Interpersonal skills with a mean (M=3.89) compared to male with mean of (M=3.77).To find out if there is a significant difference between Interpersonal skills and employee gender, a one-way analysis of variance (ANOVA) was performed. The results showed that there was no statistically significant difference between interpersonal skills and employee gender (F = 2.26, ρ= .13). Therefore, gender has no influence on employee's interpersonal skills.

Further the results shows that male had the highest mean in humility with a mean (M=3.83) compared to female with mean of (M=3.68).To find out if there is a significant difference between humility and employee gender, a one-way analysis of variance (ANOVA) was performed. The results showed that there was a statistically significant difference between humility and employee gender (F = 4.49, ρ= .04).This shows that humility is dependent on employee's age.

Finally, the results shows that both male and female had the same mean in leadership with a mean of (M=3.91). The results showed that there was no statistically significant difference between leadership and employee gender (F = .00, ρ= .96). Therefore, gender has no influence on employee's leadership.

Table 4. 5: ANOVA for gender differences on Knowledge Sharing Behaviour, Emotional Intelligence and Transformational Leadership

		Descriptive statistics.			ANOVA	
		N	Mean	Std. Deviation	F	Sig.
KSB	Male	169	4.25	0.50	1.93	0.17
	Female	168	4.15	0.75		
	Total	337	4.20	0.64		
Self-awareness	Male	169	3.75	0.62	2.27	0.13
	Female	168	3.87	0.75		
	Total	337	3.81	0.69		
Self-regulation	Male	169	3.57	0.79	6.81	0.01
	Female	168	3.78	0.70		
	Total	337	3.67	0.75		
Social skill	Male	169	3.77	0.81	1.13	0.29
	Female	168	3.68	0.75		
	Total	337	3.73	0.78		
Interpersonal skills	Male	169	3.77	0.82	2.26	0.13
	Female	168	3.89	0.68		
	Total	337	3.83	0.76		
Humility	Male	169	3.83	0.61	4.49	0.04
	Female	168	3.68	0.70		
	Total	337	3.75	0.66		
T leadership	Male	169	3.91	0.70	0.00	0.96
	Female	168	3.91	0.84		
	Total	337	3.91	0.77		

Source: Research Data (2019)

4.4.3 Job tenure Differences on Knowledge Sharing Behaviour, Emotional Intelligence and Transformational Leadership

The results presented in Table 4.6 shows that those with a job tenure of 5 years or less had the highest mean in Knowledge Sharing Behaviour (KSB) with a mean (M=4.32) while those with between 16-20 years had the lowest with mean of (M=3.97).To find out if there is a significant difference between Knowledge Sharing Behaviour and job

tenure, a one-way analysis of variance (ANOVA) was performed. The results showed that there was a statistically significant difference between Knowledge Sharing Behaviour and job tenure (F = 2.49, ρ= .04). This shows that Knowledge Sharing Behaviour is dependent on employee's job tenure.

Similarly, the results shows that those who had 5 years or less job tenure had the highest mean in Self-awareness with a mean (M=3.96) while those who had between 16-20 years had the lowest with mean of (M=3.44). One-way analysis of variance (ANOVA) was performed. The results showed that there was a statistically significant difference between Self-awareness and job tenure (F = 4.17, ρ= .00). Therefore, job tenure has an influence on employee's self-awareness.

Further the results shows that those with job tenure of between 6-10 years had the highest mean in Self-regulation with a mean (M=3.89) while those with 5 years or less had the lowest with mean of (M=3.42). Further one-way analysis of variance (ANOVA) was performed. The results showed that there was a statistically significant difference between Self-regulation and job tenure (F = 4.81, ρ= .00).This shows that Self-regulation is dependent on employee's job tenure.

The results shows also that those with job tenure of between 11-15 years had the highest mean in Social skill with a mean (M=4.04) while those with between 16-20 years had the lowest with mean of (M=3.45).The results also showed that there was a statistically significant difference between Social skill and job tenure (F = 9.43, ρ= .00). Therefore, job tenure has an influence on employee's Social skill.

Furthermore, the results shows that those with 5 years or less job tenure had the highest mean in interpersonal skills with a mean (M=4.05) while those with more than

20 years had the lowest with mean of (M=3.09). Also results showed that there was a statistically significant difference between interpersonal skills and job tenure (F = 8.55, ρ= .00). Therefore, job tenure has an influence on employee's interpersonal skills.

Further the results shows that those with more than 20years job tenure had the highest mean in humility with a mean (M=3.42) while those with between 16-20 years had the lowest with mean of (M=3.39). Further the results showed that there was a statistically significant difference between humility and job tenure (F = 5.88, ρ= .00).This shows that humility is dependent on employee's job tenure.

Finally, the results shows that those with 5 years or less and those between 16-20 years of job tenure had the highest mean in leadership with a mean (M=4.09) while those with more than 20 years had the lowest with mean of (M=3.16).To find out if there is a significant difference between leadership and job tenure, a one-way analysis of variance (ANOVA) was performed. The results showed that there was a statistically significant difference between leadership and job tenure (F = 5.53, ρ= .00). Therefore, job tenure has an influence on employee's leadership.

Table 4. 6: ANOVA for Job Tenure differences on Knowledge Sharing Behaviour, Emotional Intelligence and Transformational Leadership

		Descriptive statistics		ANOVA	
		Mean	**Std. Deviation**	**F**	**Sig.**
KSB	5yrs or less	4.32	0.60	2.49	0.04
	6-10yrs	4.27	0.52		
	11-15yrs	4.13	0.75		
	16-20yrs	3.97	0.71		
	more than 20yrs	4.08	0.46		
Self-awareness	5yrs or less	3.96	0.39	4.17	0.00
	6-10yrs	3.90	0.68		
	11-15yrs	3.72	0.72		
	16-20yrs	3.44	1.01		
	more than 20yrs	3.84	0.33		
Self-regulation	5yrs or less	3.42	0.52	4.81	0.00
	6-10yrs	3.89	0.68		
	11-15yrs	3.62	0.91		
	16-20yrs	3.59	0.67		
	more than 20yrs	3.81	0.57		
Social skill	5yrs or less	3.72	0.76	9.43	0.00
	6-10yrs	3.48	0.73		
	11-15yrs	4.04	0.72		
	16-20yrs	3.45	0.93		
	more than 20yrs	4.00	0.43		
Interpersonal skills	5yrs or less	4.05	0.51	8.55	0.00
	6-10yrs	3.65	0.82		
	11-15yrs	4.00	0.64		
	16-20yrs	3.74	0.97		
	more than 20yrs	3.09	0.80		
Humility	5yrs or less	3.88	0.65	3.02	0.02
	6-10yrs	3.73	0.70		
	11-15yrs	3.78	0.57		
	16-20yrs	3.42	0.76		
	more than 20yrs	3.90	0.63		
Transformational leadership	5yrs or less	4.09	0.46	5.53	0.00
	6-10yrs	3.81	0.81		
	11-15yrs	3.95	0.83		
	16-20yrs	4.09	0.64		
	more than 20yrs	3.16	1.04		

Source: Research Data (2019)

4.4.4 Education Differences on Knowledge Sharing Behavior, Emotional Intelligence and Transformational Leadership

The results presented in Table 4.7 shows that those with post-doctoral degree had the highest mean in Self-Awareness with a mean of (M=4.30) while those with undergraduates degree had the lowest with mean of (M=3.61). Further one-way analysis of variance (ANOVA) was performed. The results showed that there was no statistically significant difference between Self-Awareness and education (F = 1.23, ρ= .29).This shows that Self-Awareness is not dependent on employee's level of education.

The results presented in Table 4.7 shows that those with master's degree had the highest mean in Self-regulation with a mean of (M=3.71) while those with undergraduates degree had the lowest with mean of (M=3.41). Further one-way analysis of variance (ANOVA) was performed. The results showed that there was no statistically significant difference between Self-regulation and education (F = 1.19, ρ= .31).This shows that Self-regulation is not dependent on employee's level of education.

The results shows also that those with undergraduate degree had the highest mean in Social skill with a mean (M=4.21) while with doctorate degree had the lowest with mean of (M=3.67).The results also showed that there was a statistically significant difference between Social skill and level of education (F = 3.89, ρ= .01). Therefore, education level has an influence on employee's Social skill. Further the results shows that those with undergraduate degree had the highest mean in humility with a mean (M=3.94) while those with post-doctoral degree had the lowest with mean of (M=3.69). Further the results showed that there was no statistically significant

difference between humility and level of education (F = 1.21, ρ= .31).This shows that humility is not dependent on employee's education level.

The results also shows that those with doctorate degree had the highest mean in leadership with a mean (M=3.98) while those with undergraduate degree had the lowest with mean of (M=3.69).To find out if there is a significant difference between leadership and education level, a one-way analysis of variance (ANOVA) was performed. The results showed that there was no statistically significant difference between leadership and level of education (F = 2.04, ρ= .11). Therefore, education level has no influence on employee's leadership.

Table 4. 7: ANOVA for education differences on Knowledge Sharing Behaviour, Emotional Intelligence and Transformational Leadership

		Descriptive		ANOVA	
		Mean	**Std. Deviation**	**F**	**Sig.**
Self Awareness	undergraduate degree	3.61	0.59	1.23	0.29
	master's degree	3.70	0.65		
	doctorate degree	4.21	0.66		
	post-doctoral degree	4.30	0.69		
self-regulation	undergraduate degree	3.41	0.66	1.19	0.31
	master's degree	3.71	0.69		
	doctorate degree	3.69	0.82		
	post-doctoral degree	3.69	0.64		
Humility	undergraduate degree	3.94	0.63	1.21	0.31
	master's degree	3.79	0.68		
	doctorate degree	3.71	0.67		
	post-doctoral degree	3.69	0.59		
T leadership	undergraduate degree	3.69	0.69	2.04	0.11
	master's degree	3.92	0.80		
	doctorate degree	3.98	0.72		
	post-doctoral degree	3.71	0.93		
KSB	undergraduate degree	4.41	0.56	1.45	0.23
	master's degree	4.20	0.58		
	doctorate degree	4.19	0.69		
	post-doctoral degree	4.07	0.61		
	Total	4.20	0.64		

Source: Research Data (2019)

Finally, the results shows that those with undergraduate degree had the highest mean in Knowledge Sharing Behaviour (KSB) with a mean (M=4.41) while those with post-doctoral degree had the lowest with mean of (M=4.07).To find out if there is a significant difference between Knowledge Sharing Behaviour and education, a one-way analysis of variance (ANOVA) was performed. The results showed that there was no statistically significant difference between Knowledge Sharing Behaviour and education (F = 1.45, ρ= .23). This shows that Knowledge Sharing Behaviour is not dependent on employee's education.

4.5 Descriptive Statistics Results for the study variables

For clear determination of the responses made to the research items, the mean, standard deviation and significance was as discussed below:

4.5.1 Descriptive Statistics for Knowledge Sharing Behavior

The dependent variable of the study was Knowledge sharing behaviour. The results are presented in Table 4.8. With a mean (M =3.960, SD = 1.112) the results indicate most of the employees accomplish their tasks through good attitude, and collaborative knowledge with other colleagues. The results further shows that employees behavioural control towards knowledge sharing influence employees actual knowledge sharing behaviour was indicated by mean (M = 4.000, SD = 1.092). The results shows that employees are willing to share their knowledge with their colleagues freely as indicated by the mean (M = 4.160, SD = .875).

Further employees intention to share knowledge is influenced by employees attitude towards KS behaviour as shown by the results (M = 4.150, SD = .775). Employees are willing to share new knowledge with their colleagues freely as shown by the mean (M

= 4.240, *SD* = .774). The results also shows that with a mean of (*M* = 4.310, *SD* = .831) employees are willing to seek their colleagues' knowledge sharing experience when they need to learn something. Universities employees utilize the available tools to share their knowledge with their colleagues as indicated by mean (*M* = 4.390, *SD* =756). Finally university employees attend and contribute in different knowledge sharing activities as shown by the mean (*M* = 4.360, *SD* = .848).

The overall mean of (M=4.197, SD=0.640) shows that universities employees are willing to engage knowledge sharing behaviour. Further the result shows that the data experienced no skewness and kurtosis problems (-0.653 & -0.043). Thus, the statements of the variables depicted an estimate to a normal distribution. Further, values of the skewness and kurtosis as displayed in Table 4.9, are within the conventional values such that for skewness is < 3 and kurtosis < 10 (Kline, 2011). This showed a normal distribution of the responses with respect to the knowledge sharing behavior, thus, it suggests non-violation of normality assumption (Joanes & Gill, 1998). In a normal (symmetric and mound-shaped) distribution, about two-thirds of the scores fall between +1 and -1 standard deviations from the mean. While the mean should be more than the standard deviation and standard deviation less than the mean threshold.

Table 4. 8: Descriptive Statistics for Knowledge Sharing Behavior

n=337	**Mean**	**Std. Deviation**	**Skewness**	**Kurtosis**
I accomplish my tasks through good attitude, and collaborative knowledge with other colleagues	3.960	1.112	-1.092	0.478
Perceived behavioural control towards knowledge sharing influence employees actual knowledge sharing behavior	4.000	1.092	-0.929	0.006
I am willing to share my knowledge with my colleagues freely	4.160	0.875	-0.907	0.177
Attitude towards KS behaviour influence employees intention to share knowledge	4.150	0.775	-0.544	-0.367
When i learn new knowledge i share with my colleagues about it	4.240	0.774	-1.063	1.594
I seek my colleagues' knowledge sharing experience when i need to learn something	4.310	0.831	-1.068	0.770
I utilize the available tools to share my knowledge with my colleagues	4.390	0.756	-1.564	3.357
I attend and contribute in different knowledge sharing activities	4.360	0.848	-1.739	3.662
KSB	**4.197**	**0.640**	**-0.653**	**-0.043**

Source: Research Data (2019)

4.5.2 Descriptive Statistics for Self-Awareness

The first variable of the study was self-awareness. The results are presented in Table 4.9. The results indicate that most of the employees have no problem in expressing their emotions as indicated by (M=3.590, SD=1.234). The results further shows that employees often find it difficult to see things from another employee's perspective was indicated by mean (*M* = 3.680, *SD* = 1.107). The results shows that employees on whole regard themselves as highly motivated persons as indicated by the mean (*M* = 3.950, *SD* = .999).

Most employees usually find it difficult to regulate their emotions as shown by the results (*M* = 3.700, *SD* = 1.124). University Employees have good control of their

own emotions as shown by the mean (*M* = 3.880, *SD* = 1.114). Finally the overall mean of (M=3.809, SD=0.689) shows that universities employees have the character of self-awareness. Further the result shows that the data experienced no skewness and kurtosis problems (-0.653 & -0.043). This values of skewness and kurtosis displayed are within the conventional values such that for skewness is < 3 and kurtosis < 10 (Kline, 2011). This showed a normal distribution of the responses with respect to the knowledge sharing behavior, thus, it suggests non-violation of normality assumption (Joanes & Gill, 1998). In a normal (symmetric and mound-shaped) distribution, about two-thirds of the scores fall between +1 and -1 standard deviations from the mean. While the mean should be more than the standard deviation and standard deviation less than the mean threshold.

Table 4. 9: Descriptive Statistics for Self-awareness

n=337	Mean	Std. Deviation	Skewness	Kurtosis
Expressing my emotions is not a problem to me	3.590	1.234	-0.729	-0.525
I often find it difficult to see things from another's perspective	3.680	1.107	-0.852	0.043
On the whole, I'm a highly motivated person.	3.950	0.999	-1.058	0.773
I usually find it difficult to regulate my emotions.	3.700	1.124	-0.674	-0.420
I have good control of my own emotions.	3.880	1.114	-0.789	-0.415
Self-awareness	3.809	0.689	-0.850	1.513

Source: Research Data (2019)

4.5.3 Descriptive Statistics for Self-regulation

The second variable of the study was Self-regulation. The results are presented in Table 4.10. The results indicate that Many times most of the universities employees are not able figure out their emotional feeling as indicated by (M=3.090, SD=1.321).

The results further shows that most of universities employees feel that they have a number of good qualities as indicated by mean (*M* = 3.880, *SD* = 1.015). The results shows that most of the employees time and again find it difficult to stand up for their rights as indicated by the mean (*M* = 3.950, *SD* = 1.139).

Most employees usually are able to influence the way other people feel as shown by the results (*M* = 4.140, *SD* = 0.941). According to the results of the study Most of the University Employees have a gloomy perspective on most things as shown by the mean (*M* = 3.320, *SD* = 1.302). Finally the overall mean of (M=3.674, SD=0.751) shows that university employees have good knowledge on their own self-regulation. Further the result shows that the data experienced no skewness and kurtosis problems (-0.359 & -0.226). Since the values of skewness and kurtosis displayed are within the conventional values such that for skewness is < 3 and kurtosis < 10 (Kline, 2011). This showed a normal distribution of the responses with respect to the knowledge sharing behavior, thus, it suggests non-violation of normality assumption (Joanes & Gill, 1998). In a normal (symmetric and mound-shaped) distribution, about two-thirds of the scores fall between +1 and -1 standard deviations from the mean. While the mean should be more than the standard deviation and standard deviation less than the mean threshold.

Table 4. 10: Descriptive Statistics for Self-regulation

n=337	Mean	Std. Deviation	Skewness	Kurtosis
Many times, I can't figure out my emotional feeling.	3.090	1.321	-0.248	-1.110
I feel that I have a number of good qualities.	3.880	1.015	-1.026	0.681
I often find it difficult to stand up for my rights	3.950	1.139	-1.043	0.236
I'm usually able to influence the way other people feel.	4.140	0.941	-1.051	0.579
On the whole, I have a gloomy perspective on most things	3.320	1.302	-0.269	-1.178
Self-regulation	**3.674**	**0.751**	**-0.359**	**-0.226**

Source: Research Data (2019)

4.5.4 Descriptive Statistics for Social skill

The third variable of the study was Social skill. The results are presented in Table 4.11. The results indicate that most of the universities employees are generally don't find life enjoyable as indicated by (M=3.070, SD=1.399). The results further shows that most of universities employees think they can deal effectively with people as indicated by mean (M = 4.110, SD = 0.939). The results shows that most of the employees tend to change their mind frequently as indicated by the mean (M = 3.620, SD = 1.236).

Most employees have a good understanding of the emotions of the people around them as shown by the results (M = 4.010, SD = 0.927). The results also shows that employees are sensitive to the feelings and emotions of others as shown by the mean (M = 3.820, SD = 1.090).Finally the overall mean of (M=3.726, SD=0.782) shows that university employees have good socialskills traits. Further the result shows that the data experienced no skewness and kurtosis problems (-0.543 & 0.091). Since the values of skewness and kurtosis displayed are within the conventional values such that for skewness is < 3 and kurtosis < 10 (Kline, 2011). This showed a normal

distribution of the responses with respect to the knowledge sharing behavior, thus, it suggests non-violation of normality assumption (Joanes & Gill, 1998). In a normal (symmetric and mound-shaped) distribution, about two-thirds of the scores fall between +1 and -1 standard deviations from the mean. While the mean should be more than the standard deviation and standard deviation less than the mean threshold.

Table 4. 11: Descriptive Statistics for Social skill

n=337	**Mean**	**Std. Deviation**	**Skewness**	**Kurtosis**
I generally don't find life enjoyable	3.070	1.399	-0.122	-1.337
I can deal effectively with people.	4.110	0.939	-1.561	2.901
I tend to change my mind frequently.	3.620	1.236	-0.759	-0.541
I have a good understanding of the emotions of the people around me.	4.010	0.927	-1.111	1.178
I am sensitive to the feelings and emotions of others.	3.820	1.090	-0.654	-0.607
Social skill	**3.726**	**0.782**	**-0.543**	**0.091**

Source: Research data (2019)

4.5.5 Descriptive Statistics for Interpersonal skills

The fourth variable of the study was Interpersonal skills. The results are presented in Table 4.12. The results indicate that most of the universities employees always knows their friends' emotions from their behaviour as indicated by (M=3.660, SD=1.150)

The results further shows that most of universities employees are good observer of others' emotions as indicated by mean (M = 3.850, SD = 1.059). The results shows that most of the employees on the whole are able to deal with stress as indicated by the mean (M = 4.040, SD = 1.057).

Most employees have often find it difficult to show their affection to those close to them as shown by the results (M = 3.760, SD = 1.207). The results also shows that employees are normally able to "get into someone's shoes" and experience their

emotions as shown by the mean (*M* = 3.850, *SD* = 1.086). Finally the overall mean of (M=3.831, SD=0.757) shows that university employees have good Interpersonal skills traits. Further the result shows that the data experienced no skewness and kurtosis problems (-0.823 & 0.962). Since the values of skewness and kurtosis displayed are within the conventional values such that for skewness is < 3 and kurtosis < 10 (Kline, 2011). This showed a normal distribution of the responses with respect to the knowledge sharing behavior, thus, it suggests non-violation of normality assumption (Joanes & Gill, 1998). In a normal (symmetric and mound-shaped) distribution, about two-thirds of the scores fall between +1 and -1 standard deviations from the mean. While the mean should be more than the standard deviation and standard deviation less than the mean threshold.

Table 4. 12: Descriptive Statistics for Interpersonal skills

n=337	Mean	Std. Deviation	Skewness	Kurtosis
I always know my friends' emotions from their behaviour.	3.660	1.150	-0.752	-0.262
I am a good observer of others' emotions.	3.850	1.059	-0.957	0.449
On the whole, I'm able to deal with stress.	4.040	1.057	-0.968	0.134
I often find it difficult to show my affection to those close to me.	3.760	1.207	-0.704	-0.628
I'm normally able to "get into someone's shoes" and experience their emotions.	3.850	1.086	-0.641	-0.555
Interpersonal skills	3.831	0.757	-0.823	0.962

Source: Research data (2019)

4.6.6 Descriptive Statistics for Humility

The fifth variable of the study was Humility. The results are presented in Table 4.13. The results indicate that universities employees normally find it difficult to keep themselves motivated as indicated by (M=3.320, SD=1.306). The results further

shows that most of universities employees are usually able to find humility control on others as indicated by mean (*M* = 3.750, *SD* = 1.039). The results shows that most of the employees on the whole are pleased and humbled with their lives as indicated by the mean (*M* = 4.000, *SD* = 1.068).

Further most employees often would describe themselves as a humble intellectual as shown by the results (*M* = 3.880, *SD* = 0.937). The results also shows that employees tend to get involved in things they later wish they could get out of as shown by the mean (*M* = 3.660, *SD* = 1.231). Finally, the results shows that employees often pause and think about their feelings as indicated by (M=3.820, SD=1.162)

Overall mean of (M=3.754, SD=0.661) shows that most university employees portrays humility. Further the result shows that the data experienced no skewness and kurtosis problems (-0.713 & 0.060). Since the values of skewness and kurtosis displayed are within the conventional values such that for skewness is < 3 and kurtosis < 10 (Kline, 2011). This showed a normal distribution of the responses with respect to the knowledge sharing behavior, thus, it suggests non-violation of normality assumption (Joanes & Gill, 1998). In a normal (symmetric and mound-shaped) distribution, about two-thirds of the scores fall between +1 and -1 standard deviations from the mean. While the mean should be more than the standard deviation and standard deviation less than the mean threshold.

Table 4. 13: Descriptive Statistics for humility

n=337	Mean	Std. Dev	Skewness	Kurtosis
I normally find it difficult to keep myself motivated	3.320	1.306	-0.368	-1.002
I'm usually able to find humility control on others	3.750	1.039	-1.182	1.201
On the whole, I'm pleased and humbled with my life.	4.000	1.068	-1.054	0.368
I would describe myself as a humble intellectual	3.880	0.937	-0.634	-0.295
I tend to get involved in things I later wish I could get out of.	3.660	1.231	-0.620	-0.771
I often pause and think about my feelings.	3.820	1.162	-0.775	-0.522
Humility	3.754	0.661	-0.713	0.060

Source: Research data (2019)

4.5.7 Descriptive Statistics for Transformational Leadership

The moderating variable was transformational leadership. The results are presented in Table 4.14. The results indicate that university's transformational leadership is always on the lookout for new idealized influence and opportunities for the organization as indicated by (M=3.75, SD=1.175). The results further shows that university's leadership has a clear vision of its organization that inspires motivation as indicated by mean (M = 3.9, SD = 1.029). The results shows that most of the university's management embraces intellectual stimulation of the company employees as indicated by the mean (M = 3.86, SD = 0.906).

Table 4. 14: Descriptive Statistics for Transformational Leadership

n=337	**Mean**	**Std. Dev**	**Skewness**	**Kurtosis**
The university's leadership is always on the lookout for new idealized influence and opportunities for the organization.	3.75	1.175	-0.84	-0.194
The university's leadership has a clear vision of its organization that inspires motivation.	3.9	1.029	-0.858	0.087
The university's management embraces intellectual stimulation of the company employees.	3.86	0.906	-0.476	-0.298
The university's leadership always promotes individual consideration as the organization's leading force.	3.96	0.915	-0.597	-0.117
The university has leaders who are capable of changing and touching and transforming lives for performance	4.08	1.04	-1.427	1.787
Transformational leadership	**3.911**	**0.77346**	**-0.483**	**-0.412**

Source: Research data (2019)

Further most of the university's leadership always promotes individual consideration as the organization's leading force as shown by the results (M = 3.96, SD = 0.915). Finally, the results also shows that university has leaders who are capable of changing and touching and transforming lives for performance as shown by the mean (M = 4.08, SD = 1.04).

Overall mean of (M=3.911, SD=0.773) shows that most university portrays good leadership. Further the result shows that the data experienced no skewness and kurtosis problems (-0.483 & -0.412). Since the values of skewness and kurtosis displayed are within the conventional values such that for skewness is < 3 and kurtosis < 10 (Kline, 2011). This showed a normal distribution of the responses with respect to the knowledge sharing behavior, thus, it suggests non-violation of normality assumption (Joanes & Gill, 1998). In a normal (symmetric and mound-shaped) distribution, about two-thirds of the scores fall between +1 and -1 standard

deviations from the mean. While the mean should be more than the standard deviation and standard deviation less than the mean threshold.

4.5.8 Aggregate Mean Descriptive Analysis of the study variables

The results for the aggregated items for each of the independent, the moderator and the dependent variables

Table 4. 15: Aggregate Mean Descriptive Analysis of the study variables

n=337	Min	Max	Mean	Std. Deviation	Skewness	Kurtosis
KSB	1.000	5.000	4.166	0.726	-1.068	1.253
Self-awareness	1.000	5.000	3.745	0.745	-0.918	1.435
self-regulation	1.000	5.000	3.666	0.754	-0.413	0.011
social skill	1.000	5.000	3.739	0.765	-0.648	0.578
Interpersonal skills	1.000	5.000	3.805	0.765	-0.856	1.180
Humility	1.000	5.000	3.683	0.735	-0.841	0.369
Transformational leadership	1.000	5.000	3.820	0.874	-0.664	-0.005

Source: Research Data (2019)

4.6 Reliability of Study Variables

The reliability of an instrument is defined as its ability to consistently measure the phenomenon it is designed to measure. The reliability of the questionnaire was therefore tested using Cronbach's alpha measurements. Reliability has been acknowledged in the literature as the scores from a research instrument which are stable and consistent (Yasar & Cogenli, 2014; Koonce & Kelly, 2014). Given that in this research, semi-structured questionnaires were used as instruments to collect data, it was worth testing for its reliability.

According to Sekeran and Bougie (2010), the conventionally accepted level of reliability measure is set at 0.70. From the results generated, the Cronbach alpha for

each variable based on the average of inter-item correlation was above 0.70 with the highest Cronbach alpha value observed in knowledge sharing behaviour 0.865 whereas the lowest value was 0.704 with respect to self-regulation. Therefore, any Cronbach alpha value of more than .70 is regarded as a reliable measure for the construct under consideration. Evidently, the present study results demonstrate that all variables had a Cronbach alpha of more than .70. Thus, the results met the required threshold for further analysis as presented in Table 4.15.

Table 4. 16: Reliability Statistics

	Reliability Statistics		
	Cronbach's Alpha	**Cronbach's Alpha Based on Standardized Items**	N of Items
Knowledge Sharing Behavior	0.865	0.874	8
Self-Awareness	0.831	0.835	5
Self-Regulation	0.704	0.717	5
Social Skills	0.726	0.739	5
Interpersonal Skills	0.709	0.719	5
Humility	0.768	0.783	6
Transformation Leadership	0.817	0.821	5

Source: Research Data (2019)

4.7 Validity

Validity refers to the extent to which a research instrument measures what it was intended to measure (Zikmund *et al.,* 2010). This study addressed the two approaches to establish validity i.e content validity and construct validity.

4.7.1 Content Validity

To establish content validity the content of this research was validated by determining the variables which have been defined and used in literature previously.in this study

the dimensions of variables were identified from the emotional intelligence literature. Additionally, opinions were sought from experts who provided relevant inputs adding to what had been identified from literature.An assessment of content validity requires experts to attest to the content validity of each instrument. (Sekeran, 2000). In order to ensure content validity, previously validated measures were pretested and the preliminary questionnaire was pretested on a pilot set of respondent for comprehension, logic and relevance. Respondents in the pretest were drawn from the target population which were similar to those in the actual study in terms of characteristics, familiar with research topic under investigation and not the same respondents to avoid bias.

4.7.2 Construct Validity

Construct validity measures the degree to which a scale measures what it intends to measure (Garver and Mentzer, 1999) and it's assessed by factor analysis in this research. In order to assess the construct validity, scale items were examined by principal components extraction with varimax rotation. The Kaiser-Meyer-Olkin (KMO), The Bartlett's test, was found to be significant in this study and confirms the appropriateness of the factor analysis for the data set. According to Bartholomew *et al.,* (2011) and Williams *et al.,* (2010) Factor analysis refers to the idea that is quantifiable and noticeable variables in the research can be condensed to fewer fundamental variables that share a joint variance and are unobservable. The researcher ran a principal component analysis to identify patterns in data, and to express the data in such a way as to highlight their similarities and differences. Besides having data set items reduced to manageable level while retaining as much of the original information it helped in identifying groups or clusters of variables. Sampling adequacy was tested

using the Kaiser- Meyer- Olkin Measure (KMO measure) of sampling adequacy. For data to be suitable for factor analysis, the recommended value for KMO is 0.50 and the Bartlett's Test of Sphericity should be significant ($p < 0.05$) (Hair *et al.,* 2010; Tabachnick & Fidell, 2007). The convergent validity of the research instruments was assessed using Average Variance Extracted (AVE) for all variables (Hair *et al.,* 2014).

4.7.3 Face Validity

Face validity was measured by inspecting the concepts studied for their appropriateness to logically appear to reflect what it was intended to be measured to establish content validity, the variables under study were identified from past literature and diverse conceptualizations from extant literature were conducted.

4.8 Factor Analysis

Factor analysis was done for this study so as to identify the latent variables in the data constructs and to prepare it for regression (Idinga, 2015). In order to do factor analysis for knowledge sharing behavior and the other variables, the analysis requirements were assessed. Hence exploratory factor analysis was conducted for all items used to measure independent variables (self-awareness, self-regulation, social skills, interpersonal skills and humility), the moderator variable (transformational leadership) and the dependent variable (knowledge sharing behavior). Data was first assessed for its suitability with regard to its sample size and the strength of the relationship among variables or items. Factorability of the data was assessed using Bartlets test of sphericity and Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy (Bartlets test of sphericity should be statistically significant at $p<0.05$, KMO index should range from 0 to 1. Factor extraction was done using principal component analysis (PCA) where factors with Eigen values greater than 1 were

chosen. Principal component analysis was chosen as the most convenient method as it revealed the set of factors which accounted for all common and unique variances (Idinga, 2015).

4.8.1 Factor Analysis results for Knowledge Sharing Behaviour

The factor analysis results for Knowledge sharing behaviour are presented in Table 4.16. The principal component analysis with Varimax rotation was performed to identify the underlying factors of Knowledge sharing behaviour. The results depicted that the high factor loading scores showed that all the items explained Knowledge sharing behaviour as all items used to measure Knowledge sharing behaviour were all above the minimum recommended value of 0.50 (Hair *et al.,* 2014). The he EFA extracted 1 factor with an Eigen value of 3.155 which is above the accepted value of 1 (Yong & Pearce, 2013) and cumulative extracted variance of 39.439%. Thus the items was appropriate to explain the variable. Moreover, from the Table 4.16, Bartlett's Test of Sphericity produced a significant Chi-Square (χ^2) of 1945.87 (ρ<0.05) and Kaiser – Meyer - Olkin measure of sampling adequacy was 0.832 above the acceptable value of 0.50 (Field, 2005), showing that it was appropriate to subject data for factor analysis on this variable of Knowledge sharing behaviour (Leech *et al.,* 2013).

Table 4. 17: Knowledge Sharing Behaviour rotated component matrix

Scale item	Factor Loadings	
	1	2
I accomplish my tasks through good attitude, and collaborative knowledge with hotter colleagues	0.894	
Perceived behavioral control towards knowledge sharing influence employees actual knowledge sharing behavior	0.911	
I am willing to share my knowledge with my colleagues freely	0.837	
Attitude towards KS behavior influence employees intention to share knowledge	0.665	0.579
When i learn new knowledge i share with my colleagues about it		0.744
I seek my colleagues' knowledge sharing experience when i need to learn something		0.79
I utilize the available tools to share my knowledge with my colleagues		0.912
I attend and contribute in different knowledge sharing activities		0.707
Total Variance Explained: Rotation Sums of Squared Loadings		
Total	3.155	2.974
% of Variance	39.439	37.174
Cumulative %	39.439	76.613
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.832	
Bartlett's Test of Sphericity Approx. Chi-Square	1945.876	
Df	28	
Sig.	0.000	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Source: Research Data (2019)

4.8.2 Factor Analysis results for Self-Awareness

The factor analysis results for self-awareness are presented in Table 4.17. The principal component analysis with Varimax rotation was performed to identify the underlying factors of Knowledge sharing behaviour. The results depicted that the high factor loading scores showed that all the items explained self-awareness as all items used to measure self-awareness were all above the minimum recommended value of 0.50. The he EFA extracted 1 factor with an Eigen value of 3.042 which is above the

accepted value of 1 (Yong & Pearce, 2013) and cumulative extracted variance of 60.832%. Thus the item was appropriate to explain the variable. Moreover, from the Table 4.15 below, Bartlett's Test of Sphericity produced a significant Chi-Square (χ^2) of 780.569 (ρ<0.05) and Kaiser – Meyer - Olkin measure of sampling adequacy was 0.73 above the acceptable value of 0.50 (Field, 2005), showing that it was appropriate to subject data for factor analysis on this variable of self-awareness.

Table 4. 18: Self-awareness Component Matrix

Scale item	**Factor Loadings**
	1
Expressing my emotions is not a problem to me	0.812
I often find it diffuclt to see things from another's perspective	0.829
On the whole, I'm a highly motivated person.	0.895
I usually find it difficult to regulate my emotions.	0.66
I have good control of my own emotions.	0.677
Extraction Sums of Squared Loadings	
Initial Eigenvalues	3.042
% of Variance	60.832
Cumulative %	60.832
KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.73
Bartlett's Test of SphericityApprox. Chi-Square	780.569
Df	10
Sig.	0.000

Source: Research Data (2019)

4.8.3 Factor Analysis results for Self-Regulation

The factor analysis results for self-regulation are presented in Table 4.18. The principal component analysis with Varimax rotation was performed to identify the underlying factors of self-regulation. The results depicted that the high factor loading scores showed that all the items explained self-regulation as all items used to measure self-regulation were all above the minimum recommended value of 0.50. The he EFA extracted 1 factor with an Eigen value of 2.242 which is above the accepted value of 1

(Yong & Pearce, 2013) and cumulative extracted variance of 44.84%. Thus the item was appropriate to explain the variable.Moreover, from the Table 4.16 below, Bartlett's Test of Sphericity produced a significant Chi-Square (χ^2) of 371.044 (ρ<0.05) and Kaiser – Meyer - Olkin measure of sampling adequacy was 0.689 above the acceptable value of 0.50 (Field, 2005), showing that it was appropriate to subject data for factor analysis on this variable of self-regulation.

Table 4. 19: Self-regulation rotated component Matrix

Scale item	**Factor Loadings**	
	Component	
	1	2
Many times, I can't figure out my emotional feeling.	0.692	
I feel that I have a number of good qualities.	0.804	
I often find it difficult to stand up for my rights	0.742	
I'm usually able to influence the way other people feel.	0.73	
On the whole, I have a gloomy perspective on most things		0.909
Rotation Sums of Squared Loadings		
Total	2.242	1.191
% of Variance	44.84	23.814
Cumulative %	44.84	68.654
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.689
Bartlett's Test of Sphericity		
Approx. Chi-Square	371.044	
Df	10	
Sig.	0.000	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
a Rotation converged in 3 iterations.
Source: Research Data (2019)

4.8.4 Factor analysis results for social skills

The factor analysis results for social skills are presented in Table 4.19. The principal component analysis with Varimax rotation was performed to identify the underlying factors of social skills. The results depicted that the high factor loading scores showed that all the items explained social skills as all items used to measure social skills were

all above the minimum recommended value of 0.50. The he EFA extracted 1 factor with an Eigen value of 2.459 which is above the accepted value of 1 (Yong & Pearce, 2013) and cumulative extracted variance of 49.188%. Thus the item was appropriate to explain the variable. Moreover, from the Table 4.17 below, Bartlett's Test of Sphericity produced a significant Chi-Square (χ^2) of 355.14 ($\rho<0.05$) and Kaiser – Meyer - Olkin measure of sampling adequacy was 0.726 above the acceptable value of 0.50 (Field, 2005), showing that it was appropriate to subject data for factor analysis on this variable of social skills.

Table 4. 20: Social skills rotated component matrix

Scale item	**Factor Loadings**
I generally don't find life enjoyable	0.733
I can deal effectively with people.	0.705
I tend to change my mind frequently.	0.596
I have a good understanding of the emotions of the people around me.	0.785
I am sensitive to the feelings and emotions of others.	0.673
Total Variance Explained: Extraction Sums of Squared Loadings	
Initial Eigenvalues	2.459
% of Variance	49.188
Cumulative %	49.188
KMO and Bartlett's Test	
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.726
Bartlett's Test of Sphericity	
Approx. Chi-Square	355.14
Df	10
Sig.	0.000

Extraction Method: Principal Component Analysis.
a 1 components extracted.
Source: Research Data (2019)

4.8.5 Factor Analysis results for Interpersonal Skills

The factor analysis results for Interpersonal skills are presented in Table 4.20. The principal component analysis with Varimax rotation was performed to identify the underlying factors of Interpersonal skills. The results depicted that the high factor loading scores showed that all the items explained Interpersonal skills as all items

used to measure Interpersonal skills were all above the minimum recommended value of 0.50. The EFA extracted 2 factor with an Eigen values of 2.156 which is above the accepted value of 1 (Yong & Pearce, 2013) and cumulative extracted variance of 43.123%. Thus the item was appropriate to explain the variable. Moreover, from the Table 4.20, Bartlett's Test of Sphericity produced a significant Chi-Square (χ^2) of 598.737 ($\rho<0.05$) and Kaiser – Meyer - Olkin measure of sampling adequacy was 0.638 above the acceptable value of 0.50 (Field, 2005), showing that it was appropriate to subject data for factor analysis on this variable of Interpersonal skills.

Table 4. 21: Interpersonal skills rotated component matrix

Scale item	**Factor Loadings**	
	1	2
I always know my friends' emotions from their behaviour.	0.875	
I am a good observer of others' emotions.	0.915	
On the whole, I'm able to deal with stress.	0.704	
I often find it difficult to show my affection to those close to me.		0.817
I'm normally able to "get into someone's shoes" and experience their emotions.		0.821
Total Variance Explained; Rotation Sums of Squared Loadings		
Initial Eigenvalues	2.156	1.619
% of Variance	43.123	32.38
Cumulative %	43.123	75.503
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.	0.638	
Bartlett's Test of Sphericity		
Approx. Chi-Square	598.737	
Df	10	
Sig.	0.000	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Source: Research Data (2019)

4.8.6 Factor analysis results for Humility

The factor analysis results for humility are presented in Table 4.21. The principal component analysis with Varimax rotation was performed to identify the underlying

factors of humility. The results depicted that the high factor loading scores showed that all the items explained humility as all items used to measure humility were all above the minimum recommended value of 0.50. The EFA extracted 2 factor with an Eigen value of 2.503 which is above the accepted value of 1 (Yong & Pearce, 2013) and cumulative extracted variance of 41.722%. Thus the item was appropriate to explain the variable. Moreover, from the Table 4.19 below, Bartlett's Test of Sphericity produced a significant Chi-Square (χ^2) of 833.67 ($\rho<0.05$) and Kaiser – Meyer - Olkin measure of sampling adequacy was 0.665 above the acceptable value of 0.50 (Field, 2005), showing that it was appropriate to subject data for factor analysis on this variable of humility.

Table 4. 22: Humility rotated component matrix

Scale item	**Factor loadings**	
	1	2
On the whole, I'm pleased and humbled with my life.	0.684	
I would describe myself as a humble intellectual	0.746	
I tend to get involved in things I later wish I could get out of.	0.837	
I often pause and think about my feelings.	0.843	
I normally find it difficult to keep myself motivated		0.852
I'm usually able to find humility control on others		0.778
Total Variance Explained: Rotation Sums of Squared Loadings		
Initial Eigenvalues	2.503	1.813
% of Variance	41.722	30.216
Cumulative %	41.722	71.939
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.665
Bartlett's Test of Sphericity		
Approx. Chi-Square		833.67
Df		15
Sig.		0.000

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Source: Research Data (2019)

4.8.7 Factor analysis results for Transformational Leadership

The factor analysis results for transformational leadership are presented in Table 4.22. The principal component analysis with Varimax rotation was performed to identify the underlying factors of transformational leadership. The results depicted that the high factor loading scores showed that all the items explained transformational leadership as all items used to measure transformational leadership were all above the minimum recommended value of 0.50. The he EFA extracted 2 factor with an Eigen value of 2.279 which is above the accepted value of 1 (Yong & Pearce, 2013) and cumulative extracted variance of 45.578%. Thus the item was appropriate to explain the variable. Moreover, from the Table 4.22, Bartlett's Test of Sphericity produced a significant Chi-Square (χ^2) of 836.86 ($\rho<0.05$) and Kaiser – Meyer - Olkin measure of sampling adequacy was 0.684 above the acceptable value of 0.50 (Field, 2005), showing that it was appropriate to subject data for factor analysis on this variable of transformational leadership.

Table 4. 23: Transformational leadership rotated component matrix

Scale item	Factor Loadings	
	1	2
The university's leadership is always on the lookout for new idealized influence and opportunities for the organization.	0.905	
The university's leadership has a clear vision of its organization that inspires motivation.	0.937	
The university's management embraces intellectual stimulation of the company employees.	0.641	
The university's leadership always promotes individual consideration as the organization's leading force.		0.779
The university has leaders who are capable of changing and touching and transforming lives for performance		0.913
Total Variance Explained; Rotation Sums of Squared Loadings		
Total	2.279	1.672
% of Variance	45.578	33.433
Cumulative %	45.578	79.01
KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		0.684
Bartlett's Test of Sphericity		
Approx. Chi-Square	836.861	
Df	10	
Sig.	0.000	

Extraction Method: Principal Component Analysis.
Rotation Method: Varimax with Kaiser Normalization.
Source: Research Data (2019)

4.8.8 Data Transformation

After factor analysis all items that did not meet loading criteria were dropped and data was transformed by getting the means of the items that loaded to the respective factors and from categorical to interval scale by getting the average score for all items in each variables. Then the means of the various factors derived wereused for further analysis. Table 4.23 shows the results on data transformation. From the findings, knowledge sharing behaviour had the highest mean (4.166) followed by transformational leadership (3.820), while self-regulation had the lowest mean of (3.666). The implication is that the knowledge sharing behaviour has exhibited superior factor among academic staff in Kenyan universities. The standard deviations for all the

variables were less than 1 indicating less variation in the responses. Finally, all independent variables and the dependent variable were normally distributed as shown in Table 4.23 below.

Table 4. 24: Data transformation

n=337	Min	Max	Mean	Std. Dev	Skewness	Kurtosis
KSB	1.000	5.000	4.166	0.726	-1.068	1.253
Self-awareness	1.000	5.000	3.745	0.745	-0.918	1.435
self-regulation	1.000	5.000	3.666	0.754	-0.413	0.011
social skill	1.000	5.000	3.739	0.765	-0.648	0.578
Interpersonal skills	1.000	5.000	3.805	0.765	-0.856	1.180
Humility	1.000	5.000	3.683	0.735	-0.841	0.369
Transformational leadership	1.000	5.000	3.820	0.874	-0.664	-0.005

Source: Research Data (2019)

4.9 Tests for Regression Assumptions

According to Yu, (2010) the tests of assumptions aid the examiner to authenticate the nature of the data and identify the applicable model for the study that ensures unbiased, consistent and efficient estimates. Accordingly, if the regression assumptions are violated, it will produce biased estimates of the links between variables, unreliable confidence intervals as well as significance tests (Chatterjee & Hadi, 2012; Cohen *et al.,* 2003). Therefore, statistical assumptions were tested to establish if the data met the normality, heteroscedasticity, multicollinearity and autocorrelation assumptions. It was on the basis of these results, that the tests of associations and prediction were performed.

4.9.1 Test for Normality

According to Razali & Wah, (2011) Normality tests are done to check whether the data collected, organized and summarized is normally distributed. If the assumption is

violated there is a possibility that the residuals in the model will give misleading T-tests, F-tests and Chi-square tests results. Subsequently, if the study variables are not found to be normally distributed, they can be transformed. For the purposes of this study, normality tests were performed by utilizing the commonly used methods namely the Kolmogorov-Smirnov and Shapiro-Wilk tests (Ghasemi & Zahediasi, 2012).

Moreover, if the tests of normality are significant, it suggests that the data is not normally distributed. Thus, for data to be considered normal, the K-S and S-W tests should not be significant (Tabachnick & Fidel, 2013). Evidently, the results presented in Table 4.24 below, confirmed that normality of the data was not a problem because tests of K-S and S-W of all the variables were not significant. Hence, the data distribution in the study was reliable for multivariate analysis.

Table 4. 25: Test for Normality

	Kolmogorov-Smirnova			Shapiro-Wilk		
	Statistic	**df**	**Sig.**	**Statistic**	**df**	**Sig.**
Unstandardized Residual	0.023	337	.200*	0.998	337	0.992
Standardized Residual	0.023	337	.200*	0.998	337	0.992
Studentized Residual	0.023	337	.200*	0.998	337	0.99

* This is a lower bound of the true significance.
a Lilliefors Significance Correction
Source: Research Data (2019)

4.9.2 Test for multicollinearity

Multiple linear regressions assume that there is no multicollinearity in the data. Multicollinearity occurs when the independent variables are too highly correlated with each other. Multicollinearity may be checked multiple ways: Correlation matrix-when computing a matrix of Pearson's bivariate correlations among all independent variables, the magnitude of the correlation coefficients should be less than 0.80 in

order to have no multicollinearity; Variance Inflation Factor (VIF) - the VIFs of the linear regression indicate the degree that the variances in the regression estimates are increased due to multicollinearity. VIF values higher than 10 indicate that multicollinearity is a problem. In addition, tolerance values of less than 0.1 indicate the presence of multicollinearity. The findings in Table 4.25 revealed that the VIF values for all the independent variables were below 10 and tolerance values of above 0.1 This means that for all the independent variables, there was no presence of multicollinearity.

Table 4. 26: Test for multicollinearity

	Collinearity Statistics	
	Tolerance	VIF
Self-awareness	0.591	1.693
Self-regulation	0.628	1.591
Social skill	0.585	1.709
Interpersonal skills	0.588	1.699
Humility	0.482	2.074
Transformational leadership	0.605	1.653

Source: Research Data (2019)

4.9.3 Test for Autocorrelation

Autocorrelation represents the degree of similarity between a given time series and a lagged version of itself over successive time intervals. Autocorrelation measures the relationship between a variable's current value and its past values. The Durbin Watson (DW) statistic is used test for autocorrelation in the residuals from a statistical regression analysis. The Durbin-Watson statistic will always have a value between 0 and 4. A value of 2.0 means that there is no autocorrelation detected in the sample. Values from 0 to less than 2 indicate positive autocorrelation and values from from 2 to 4 indicate negative autocorrelation (Field, 2009)

Therefore, from table 4.26 indicated a positive autocorrelation. Thus the results indicated a significant autocorrelated relationship between all the independent variables and knowledge sharing behaviour. This implied non-violation of the autocorrelation assumptions.

Table 4. 27: Test for Autocorrelation

	Durbin-Watson
Direct effect	1.842
Moderation effect	1.816

Source: Research Data (2019)

4.9.4 Test for Homoscedasticity

Homoscedasticity was measured by Levene's test. This test examines whether or not the variance between independent and dependent variables is equal. The Levene's statistic for equality of variances was used to test for the assumption of homoscedasticity. Violation of homoscedasticity of variance is confirmed if the Levene's test statistic is found to be significant (alpha level of 0.05).as shown in the table 4.27. If the Levene's Test for Equality of Variances is statistically significant α= .05 this indicates that the group variances are unequal. It is a check as to whether the spread of the scores in the variables are approximately the same. The findings in Table 4.27 revealed that basing on Levene statistic, homoscedasticity is not a problem for all the variables, p-value > .05. This essentially means that there is a linear relationship and there is no need to have a non-linear data transformation or quadratic term to fix. The assumptions of homoscedasticity of variance in this study was therefore supported.

Table 4. 28: Test for Homoscedasticity

	Levene Statistic	df1	df2	Sig.
KSB	0.381	1	335	0.101
Self-awareness	1.951	1	335	0.163
self-regulation	0.139	1	335	0.709
social skill	0.162	1	335	0.688
Interpersonal skills	0.06	1	335	0.807
Humility	2.314	1	335	0.129
Transformational leadership	1.622	1	335	0.106

Source: Research Data (2019)

4.10 Correlation Analysis

Correlation analysis is important in a research undertaking. It is a measure of the existing relationship between the independent factors or variables and the dependent factor or variable and also between the independent factors. Correlation analysis provides a means of understanding the magnitude and direction of the existing relationship and provides a way of establishing whether there exists a linear relationship among the variables being examined. Generally, for scale measures, the Pearson Correlation coefficient is used to measure the relationships between the variables. Concerning the correlation coefficient, it varies between -1 and +1 with values close to -1 or +1 indicating a strong relationship while values close to 0 in either case are indicative of a weak relationship.

The resultant correlations were indicated by the prefix ‘r’ – where the degree of correlation was expressed by a value of the coefficient (Katz 2006). From the results in table 4.28, there is a positive and significant correlation between the independent variables and knowledge sharing behaviour. Particularly, the correlation results showed that self-awareness has a positive and significant relationship with knowledge sharing behaviour (r =.666, ρ<0.01). Self-regulation positively and statistically significantly correlates with knowledge sharing behaviour (r =.533, ρ<0.01).

Moreover, results indicate that social skills positively and significantly relates to knowledge sharing behaviour (r =.546, ρ<0.01). From the results, interpersonal skills is positively and significantly correlated with knowledge sharing behaviour (r =.579, ρ<0.01). Humility positively and significantly correlated with knowledge sharing behavior (r =.673, ρ<0.01) while transformational leadership showed a positively correlation with knowledge sharing behaviour respectively (r =.615, ρ<0.01).

Table 4. 29: Pearson correlation coefficient of study variables

	KSB	SA	SR	SS	IS	H	TL
KSB	1						
SA	.666**	1					
SR	.533**	.502**	1				
SS	.546**	.391**	.504**	1			
IS	.579**	.387**	.345**	.434**	1		
H	.673**	.462**	.441**	.571**	.593**	1	
TL	.615**	.523**	.339**	.373**	.490**	.499**	1

** Correlation is significant at the 0.01 level (2-tailed).
* Correlation is significant at the 0.05 level (2-tailed).
Source: Research Data (2019)

KSB = *knowledge sharing behaviour*
SA = *self-awareness*
SR = *self-regulation*
SS = *social skills*
IS = *interpersonal skills*
H = *humility*
TL = *transformational leadership*

4.11 Test of Hypothesis

Ten hypotheses were proposed to examine the direct and moderated effects of emotional intelligence, transformational leadership and knowledge sharing behavior test to ascertain the effects of the relationship between variables. For the direct effects hypothesis $H_{O1:}$ - $H_{O5:}$ Multiple regression model was used to ascertain and establish the direct relationship between the variables. Also for the moderating relationship

hypothesis $H_{O6a:}$ - $H_{O6e:}$ Hierarchical regresin moderation model was used to ascertain and establish the moderating relationship between the variables.

Hypothesis testing direct relationship

4.11.1 Relationship between Emotional Intelligence and Knowledge Sharing Behavior

A multiple linear regression analysis was performed to calculate the coefficients of independent variables with knowledge sharing behavior. The combined prediction of all the variables accounted for approximately 66% of the total variation in knowledge sharing behavior (R= .81, R^2 = .66). The regression model showed that the joint prediction of all the independent variables as depicted in Table 4.29 below was statistically significant (F = 127.88, ρ=.000). Thus, the model was fit to predict knowledge sharing behaviour using self-awareness, self-regulation, social skill, interpersonal skills and humility.

4.11.2 Relationship between Self-awareness and Knowledge Sharing Behavior

The first hypothesis (H_{O1} :) stated that there was no significant effect of self-awareness on knowledge sharing behaviour among academic staff in Kenyan universities. However, the findings in Table 4.29 showed that self-awareness has a positive and significant effect on knowledge sharing behaviour (β = .37, $p<.05$). This implies that there is a probability of .347 that knowledge sharing behaviour would increase with increase in the self-awareness. Thus, the hypothesis was rejected. More findings in Table 4.29 revealed the effect on knowledge sharing behaviour is attributed to self-awareness by over 9 times (t=9.37) more compared to the effect attributed to the standard error associated with it. Goleman, (2010) supported this

indicating that employees who are aware of their emotions are able to manage them, (rather than to react to them) and adequately respond to situations as they come up.

Instead of reacting to their emotions, they are able to engage their thinking capacity to come up with better decisions. Reacting to emotions can damage relationships among staffs. Self-aware employees have a high awareness of the emotions of those around them. They are therefore able to get to the cause of strong emotional reactions of others. Employees should not only pick words being spoken but also emotions behind the words. People feel they are being heard when their emotions are acknowledged.

4.11.3 Relationship between Self-regulation and Knowledge Sharing Behavior

The second hypothesis (H02 :) stated that there was no significant effect of self-regulation on knowledge sharing behaviour among academic staff in Kenyan universities. However, the findings in Table 4.29 showed that self-regulation has a positive and significant effect on knowledge sharing behaviour ($\beta = 0.11$, $p<0.05$). This implies that there is a probability of 0.11 that knowledge sharing behaviour would increase with increase in the self-regulation. Thus, the hypothesis was rejected. More findings in Table 4.29 revealed the effect on knowledge sharing behaviour is attributed to self-regulation by over 2 times ($t=2.558$) more compared to the effect attributed to the standard error associated with it. This supported by Chih-Jou Chen and Shiu-Wan Hung (2010), as they determined that knowledge sharing and self-regulation is one's confidence in an ability to provide knowledge that is valuable to others. In their study, Knowledge sharing self-regulation is the member's self-evaluation and confidence in his or her skills and capabilities to respond to questions posted by other members, and to provide knowledge that is valuable and useful to

others. Through sharing useful knowledge, people feel more confident in what they can do.

4.11.4 Relationship between Social Skills and Knowledge Sharing Behavior

The third hypothesis (H03 :) stated that there is no significant effect of social skill on knowledge sharing behaviour among academic staff in Kenyan universities. However, the findings in Table 4.29 showed that social skills has a positive and significant effect on knowledge sharing behaviour ($\beta = 0.10$, $p<0.05$). This implies that there is a probability of 0.10 that knowledge sharing behaviour would increase with increase in the social skills. Thus, the hypothesis was rejected. More findings in Table 4.29 revealed the effect on the knowledge sharing behaviour is attributed to social skills by over 2 times ($t=2.48$) more compared to the effect attributed to the standard error associated with it. Foss, et al (2010) agreed upon the fact that knowledge sharing through social skills among staff is highly beneficial to the organizations, providing for improved innovation capacity, greater problem-solving capacity, new knowledge, and capabilities, all of these sustaining the competitive advantage of the organization.

Similarly, Cabrera & Cabrera (2005) posits that if individuals consider their knowledge to be useful to others, they will be more likely to make the effort to share it. Thus, the level of sharing increases when individuals believe that their contribution makes a difference and their level of self-efficacy is high, in an environment where employees socialize and interact frequently, with little regard to their organizational status, they become knowledgeable about the resources they can find in their colleagues. Abzari et al. (2014) have identified that social and emotional competence have an impact on employees' knowledge sharing behavior. Also, the effect of

emotional intelligence competency has been proved to be positive and significant on knowledge sharing behavior.

4.11.5 Relationship between Interpersonal Skills and Knowledge Sharing Behavior

The fouth hypothesis (H04 :) stated that there is no significant effect of interpersonal skills on knowledge sharing behaviour among academic staff in Kenyan universities. However, the findings in Table 4.29 showed that interpersonal skills has a positive and significant effect on knowledge sharing behaviour ($\beta = 0.18$, $p<0.05$). This implies that there is a probability of 0.18 that knowledge sharing behaviour would increase with increase in the interpersonal skills. Thus, the hypothesis was rejected. More findings in Table 4.29 revealed the effect on the knowledge sharing behaviour is attributed to interpersonal skills by over 4 times ($t=4.53$) more compared to the effect attributed to the standard error associated with it. This was supported by Chen (2011), proposed that knowledge sharing is a voluntary activity in which knowledge is transmitted and distributed from one individual to others.

There are numerous variants of such definitions stressing the importance of knowledge transfer through interpersonal relations from an employee to another. Similarly, Yang and Lai (2011) emphasize the potential usefulness of knowledge transferred to others. Thus understood, knowledge sharing as a process by which an individual imparts his or her expertise, insight, or understanding to another individual so that the recipient may potentially acquire and use the knowledge to perform his or her task(s) better.

Arakelian *et al.,* (2013) have conducted a structural equation modeling between emotional intelligence and knowledge sharing. Their research pinpoints a meaningful

positive relationship between the two areas. Moreover, it has found positive relationships among three dimensions of emotional intelligence: self-awareness, social-awareness and relation management, and knowledge sharing.

4.11.6 Relationship between Humility and Knowledge Sharing Behavior

The fifth hypothesis (H05 :) stated that there is no significant effect of humility on knowledge sharing behaviour among academic staff in Kenyan universities. However, the findings in Table 4.29 showed that humility has a positive and significant effect on knowledge sharing behaviour ($\beta = 0.29$, $p<0.05$). This implies that there is a probability of 0.300 that knowledge sharing behaviour would increase with increase in the humility. Thus, the hypothesis was rejected. More findings in Table 4.29 revealed the effect on the knowledge sharing behaviour is attributed to humility by over 6 times ($t=6.32$) more compared to the effect attributed to the standard error associated with it. This was supported by Crossan et al., (2008) make humility in organizations an idea whose time has come. In light of anticipated challenges and changes that continue to unfold in the 21st century, scholars in public and private institutions have suggested a greater need for organizational members to have the humility to acknowledge areas of ignorance and inexperience and to foster the learning and adaptation that will be required to succeed in an increasingly unpredictable workplace.

Table 4. 29: Regression Coefficient of Study Variables

	Unstandardized Coefficients		Standardized Coefficients		
	B	**Std. Error**	**Beta**	**T**	**Sig.**
(Constant)	0.37	0.16		2.39	0.02
Self-awareness	0.36	0.04	0.37	9.37	0.00
self-regulation	0.10	0.04	0.11	2.58	0.01
social skill	0.07	0.04	0.10	2.48	0.01
Interpersonal skills	0.19	0.04	0.18	4.53	0.00
Humility	0.24	0.05	0.29	6.32	0.00
Summary Statistics					
R	*0.81*				
R Square	*0.66*				
Adjusted R Square	*0.65*				
Std. Error of the Estimate	*0.43*				
Change Statistics					
F Change	*127.88*				
df1	*5.00*				
df2	*331.00*				
Sig. F Change	*0.00*				
Durbin-Watson	1.84				

a Dependent Variable: KSB

Source: Research Data (2019)

4.12 Testing For Moderating Effect of Transformational Leadership

The moderating effect was tested in a series of hierarchical blocks. In model 1 all the five variables Self-awareness, self-regulation, social skill, Interpersonal skills, and humility were tested. The independent variables were standardized to z scores so as to reduce the effects of multicollinearity and simplify interpretations. Then a cross product of the z scores of the moderator with each independent variable was then computed. In model 2, transformational leadership which is a moderator was also tested so as to establish the contribution on the model. In model 3 to model 7, the interaction terms between Self-awareness* transformational leadership, self-regulation* transformational leadership, social skill* transformational leadership, Interpersonal skills* transformational leadership and humility* transformational leadership was hierarchically tested.

4.12.1 Transformational Leadership on the Relationship between Self-Awareness and Knowledge Sharing Behaviour

The moderation effect of transformational leadership on the relationship between Self-awareness on Knowledge Sharing Behaviour is highlighted in table 4.30. From the findings, 77% was explained by the moderation effect of transformational leadership between self-awareness and knowledge sharing behaviour (R=0.88, R-sq=0.77). The results also showed that transformational leadership has a positive and significant moderating effect on the relationship between self-awareness and knowledge sharing behaviour ($\beta = 1.195$, $\rho<0.05$). This is consistent with Carmeli, (2003) Transformational Leaders are aware of their emotions and are able to manage them, (rather than to react to them) and adequately respond to situations as they come up.

Transformational leaders in the education industry were also seen to be responsible for laying the foundation for changes in the organizational culture, strategies and even structures that are similar to any other corporate setting (Yu& Jantzi, 2012). Strategies may include the development of employees to attain a higher professional level that will directly increase their (Clark et al., 2008) capabilities, innovativeness and give more empowerment to their subordinates to shape initiatives that will bring about the much-needed changes.

4.12.2 Transformational Leadership on the Relationship between Self-regulation and Knowledge Sharing Behaviour

The moderation effect of transformational leadership on the relationship between Self-regulation on Knowledge Sharing Behaviour, is highlighted in table 4.30. From the findings, 78% was explained by the moderation effect of transformational

leadership between self-regulation and knowledge sharing behaviour (R=0.88, R-sq=0.78,). From the findings transformational leadership has a positive and significant moderating effect on the relationship self-regulation and knowledge sharing behaviour ($\beta = 0.483$, $\rho<0.05$).

Transformational Leaders have self-generated thoughts, feelings, and actions that are planned are able attainment of personal and institutional and organizational goals. Li *et al.,* (2014) found transformational leadership positively influenced leader-member exchange, which in turn led to increased knowledge sharing. Other scholars also found out that transformational leadership facilitated knowledge sharing by enhancing followers' trust in a leader (Lee *et al.,* 2014). Therefore, transformational leadership drives high emotional intelligence and high knowledge sharing behavior across the leadership continuum.

4.12.3 Transformational Leadership on the Relationship between social skill and Knowledge Sharing Behaviour

The moderation effect of transformational leadership on the relationship between Social Skills on Knowledge Sharing Behaviour, is highlighted in table 4.30. From the findings, 79% was explained by the moderation effect of transformational leadership between social skill and knowledge sharing behaviour (R=0.89, R-sq=0.79,). The results also indicate that there is a positive and significant moderating effect of transformational leadership on the relationship between social skill and knowledge sharing behaviour ($\beta = 0.631$, $\rho<0.05$). Indeed, transformational leaders are once enhancing improved relationships between employees, better communication ways and an increased level of trust, they automatically enhance knowledge sharing. According to Benson (2010), emotional intelligence covers the process of managing

personal social and environmental changes by coping with a situation, solving problems and making decisions immediately, and realistically. It is a set of abilities related to processing emotions and emotional information.

This is supported by the literature that transformational leadership as argued by Nhat (2016) through its constructs plays a key role in aggrandizing knowledge sharing behavior as follows. Idealized Influence enable leaders who display behaviors of honesty, integrity, power, and confidence, have a collective responsibility and genuine care for others, and are admired by their employees. Idealized Influence (Attribute) refers to leaders who have the ability to build trust in their followers while Idealized Influence (Behavior) refers to leaders who act with integrity (Nhat, 2016) which finally augments knowledge sharing behavior.

Inspirational Motivation: Transformational leaders inspire followers by providing meaning and challenge to the work, communicating high expectations for the group, sharing the vision, and arousing enthusiasm and optimism about the future of the organization (Nhat, 2016) which in turn escalates knowledge sharing behavior. Intellectual Stimulation: Transformational leaders stimulate innovation and creativity of followers by promoting critical thinking to solve problems, questioning assumptions, approaching old situations in new ways, and soliciting creative ideas to problems (Nhat, 2016) which exacerbate knowledge sharing behavior. Individual Consideration: Transformational leaders pay close attention to the individual needs of followers for achievement and growth. They act as a mentor and coach, recognizing individual abilities, aspirations, and strengths (Nhat, 2016) which in essence accentuate knowledge sharing behavior.

4.12.4 Transformational Leadership on the Relationship between Interpersonal Skills and Knowledge Sharing Behaviour

The moderation effect of transformational leadership on the relationship between interpersonal skills on Knowledge Sharing Behaviour, is highlighted in table 4.30. From the findings, 81% was explained by the moderation effect of transformational leadership between interpersonal skills and knowledge sharing behavior (R-sq=0.81, R=0.90). The beta value (β= 0.624, ρ<0.05) in table 4.30 shows that transformational leadership has a positive and significant moderating effect on the relationship between interpersonal skills and knowledge sharing behaviour. The greater the leaders' emotional intelligence, the better leaders are at managing strong relationships by using emotions, and the better they are able to demonstrate effective performance (George, 2000). Furthermore, to be of benefit to a team and the work group, it has been suggested that leaders need to establish strong emotional relationships with team members (Goleman *et al*., 1999), and be able to effectively manage those relationships (George, 2000).

Current research work is increasingly recognizing the importance of emotions. George (2000) in a study describes how aspects of emotional intelligence, including the appraisal and expression of emotion, knowledge of emotions and management of emotions, facilitate leaders' ability to develop collective goals with followers, communicate the importance of work activities to followers and motivate followers by generating enthusiasm, confidence, and trust. In a similar way, Bass (2002) notes that several aspects of emotional intelligence are critical for transformational leaders who score high on visionary leadership and individualized consideration. Engaging followers by conveying an inspiring vision through emotional language and

communication has been considered as the most important role of leaders in organizations (Ashkanasy *et al.,* 2000).

4.12.5 Transformational Leadership on the Relationship between Humility and Knowledge Sharing Behaviour

The moderation effect of transformational leadership on the relationship between humility on Knowledge Sharing Behaviour, is highlighted in table 4.30. From the findings, 81% was explained by the moderation effect of transformational leadership between humility and knowledge sharing behaviour (R-sq= 0.81, R= 0.90). however, the results also indicate that there is a positive and insignificant moderating effect of transformational leadership on the relationship between humility and knowledge sharing behaviour (β = 0.01, ρ>0.05). This is consistent with literature that since a leader's humility expresses the leader's desire to achieve accurate self-awareness (Owens *et al.,* 2013). To develop such an awareness, leaders with high expressed humility may focus on interactions in organizations through which they could receive self-evaluative information more than sharing knowldge. They interact with employees seriously and have the potential to build and maintain a higher-quality and more credible two-way feedback channel (Owens *et al.,* 2013). As a result, employees would be motivated to seek feedback information more than sharing knowldge.

In addition, leader's expressed humility contains a genuine appreciation of others' strengths or abilities (Owens *et al.,* 2013). Leaders who possess high expressed humility tend to give credit to employees' extra efforts (Owens *et al.,* 2013) more than sharing information thus the results are consistent with the results indicating that there is a positive and insignificant moderating effect of transformational leadership on the relationship between humility and knowledge sharing behaviour (β = 0.01, ρ>0.05).

Because they are more likely to notice and encourage the positive behaviors and initiative of their subordinates more than sharing what they have.

Working with such leaders, employees could perceive that their efforts are expected and valued and may consider their leaders as secure and reliable sources for feedback rather than sharing what they have. Leaders with high expressed humility are considered to have high reachability and teach ability (Owens *et al.,* 2013) more than sharing what they have and receptive to their employees' ideas, advice, or information (Rego *et al.,* 2018).

For humble leaders, employees' feedback-seeking behavior is more likely to be seen as a beneficial practice that may contribute to learning and development for both supervisors and subordinates. As such, humble leaders could create a supportive environment for personal learning and development (Sousa and van Dierendonck, 2017), which could encourage employees to engage in feedback seeking rather than sharing which results to positive and insignificant moderating effect of transformational leadership on the relationship between humility and knowledge sharing behaviour ($\beta = 0.01$, $\rho > 0.05$). Also traditional top-down approach has not been keeping up with the times (Wang *et al.,* 2016), certain behaviors (Lu *et al.,* 2018), because of their leaders′ status quo.

Table 4. 30: Regression hierarchical model for testing the moderating Effect of Transformational Leadership

	Model 1 β(S.E)	**Model 2** β(S.E)	**Model 3** β(S.E)	**Model 4** β(S.E)	**Model 5** β(S.E)	**Model 6** β(S.E)	**Model 7** β(S.E)
(Constant)	(-0.15(.05)*	(-0.15(.05)**	(-0.02(.03)	0.00(.03)	(-0.01(.03)	(-0.01(.03)	(-0.01(.03)
Zscore(Self Awareness)	0.50(.07)**	0.44(.07)**	(-0.45(.06)**	(-0.1(.11)	0.05(.11)	0.22(.11)*	0.22(.12)
Zscore(Self-Regulation)	0.00(.07)	0.00(.07)	0.18(.04)**	(-0.14(.10)	0.18(.13)	0.15(.12)	0.15(.12)
Zscore(Social Skills)	0.01(.07)	(-0.01(.07)	0.10(.05)**	0.10(.05)*	(-0.34(.12)	(-0.12(.12)	(-0.12)(.13)
Zscore(Interpersonal Skills)	0.24(.07)**	0.20(.07)*	0.16(.05)**	0.15(.05)	0.14(.04)	(-0.23(.07)**	(-0.23(.07)**
Zscore(Humility)	0.26(.08)**	0.22(.08)*	0.24(.05)**	0.25(.05)**	0.24(.05)**	0.22(.05)**	0.22(.14)
Zscore(Trans leadership)		0.21(.07)**	(-0.57(.06)**	(-0.5(.06)**	(-0.48(.06)**	(-0.51(.06)**	(-0.51(.06)
Zscore(Self Awareness _TL)			1.38(.07)**	0.71(.18)**	0.47(.19)	0.12(.19)	0.12(.21)
Zscore(Self-Regulation _TL)				0.56(.14)**	0.03(.20)	0.07(.19)	0.07(.19)
Zscore(Social Skills _TL)					0.73(.19)**	0.37(.19)*	0.37(.20)*
Zscore(Interpersonal Skills _TL)						0.73(.12)**	0.73(.12)**
Zscore(Humility _TL)							0.01(.96)
Models Summary Statistics							
R	*0.65*	*0.67*	*0.88*	*0.88*	*0.89*	*0.90*	*0.90*
R Square	*0.43*	*0.44*	*0.77*	*0.78*	*0.79*	*0.81*	*0.81*
Adjusted R Square	*0.41*	*0.43*	*0.76*	*0.77*	*0.78*	*0.80*	*0.80*
Change Statistics							
R change	*0.34*	*0.02*	*0.32*	*0.01*	*0.01*	*0.02*	*0.00*
F Change	*39.23*	*9.53*	*45.227*	*15.06*	*15.27*	*37.72*	*0.00*
df1	*5*	*1*	*1*	*1*	*1*	*1*	*1*
df2	*327*	*326*	*325*	*324*	*323*	*322*	*321*
Sig. F Change	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.00*	*0.99*

**p<0.05,*p<.001

Source: Research Data (2019)

4.12.6 Mod graph for Moderation Effect of Transformational leadership and Emotional intelligence constructs

In order to better understand the nature of the interaction between TL (Transformational leadership) and emotional intelligence constructs,(self-awareness, self-regulation, social skills, interpersonal skills and humility) and knowledge sharing behaviour, The moderated results are presented on a moderation graph as suggested by Aiken & west (1991) who proposed that it is insufficient to conclude that there is interaction without probing the nature of that interaction at different levels of the moderator. The significance of the regression coefficient of Transformational leadership was assessed at low, medium, and high levels of the constructs.

The moderating effect of Transformational leadership on the relationship between emotional intelligence constructs and knowledge sharing behavior was determined using the graphical method. The analysis revealed that the effect of emotional intelligence on knowledge sharing behavior has stronger significance on Knowledge Sharing Behaviour at higher levels of Transformational leadership than at the lower levels of the same. It further indicates that at low levels of the constructs the high Transformational leadership has a bigger moderating effect on the relationship than with the low level. The slopes in the figures indicate high levels of association and strong significance between emotional intelligence constructs and knowledge sharing behavior as compared to when it is with medium and low Transformational leadership as shown.

4.12.7 Modgrap for Moderating Effect of Self-awareness and Knowledge Sharing Behaviour

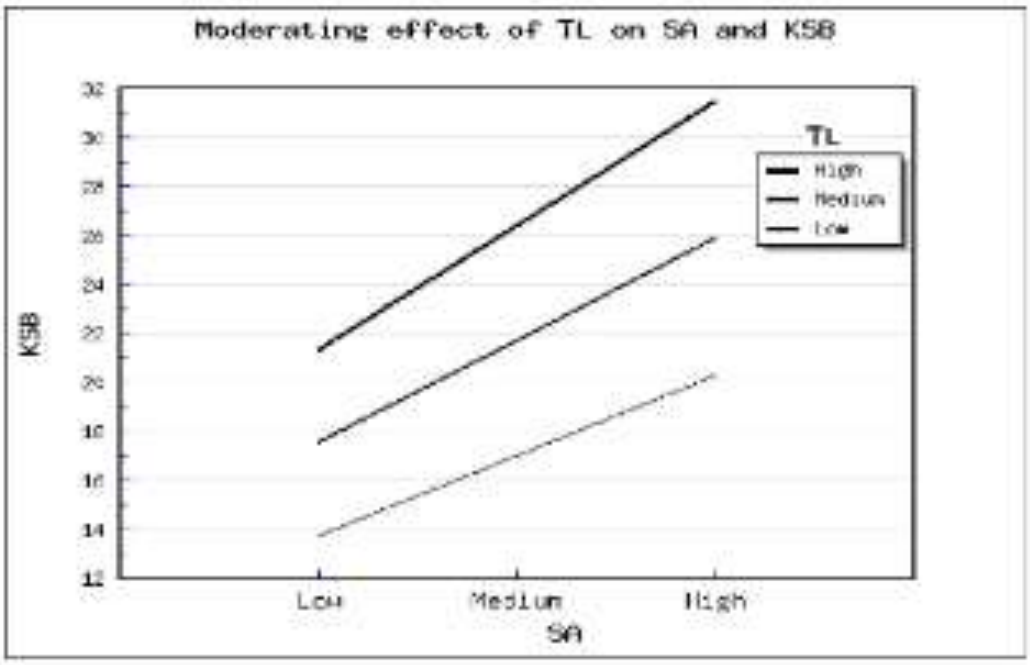

Figure 4. 1: Modgraph for moderating of Transformational leadership on the relationship between Emotional self-awareness and Knowledge Sharing Behaviour.

As concerns the moderating effect, Figure 4.1 reveals an enhancing effect that as self-awareness and transformational leadership increases, knowledge sharing increases in all levels high as indicated by the steepness of the slopes. So, the hypothesis was not supported. Thus, transformational leadership strengthens the relationship.

4.12.8 Modgrap for Moderating Effect of Self-Regulation and Knowledge Sharing Behaviour

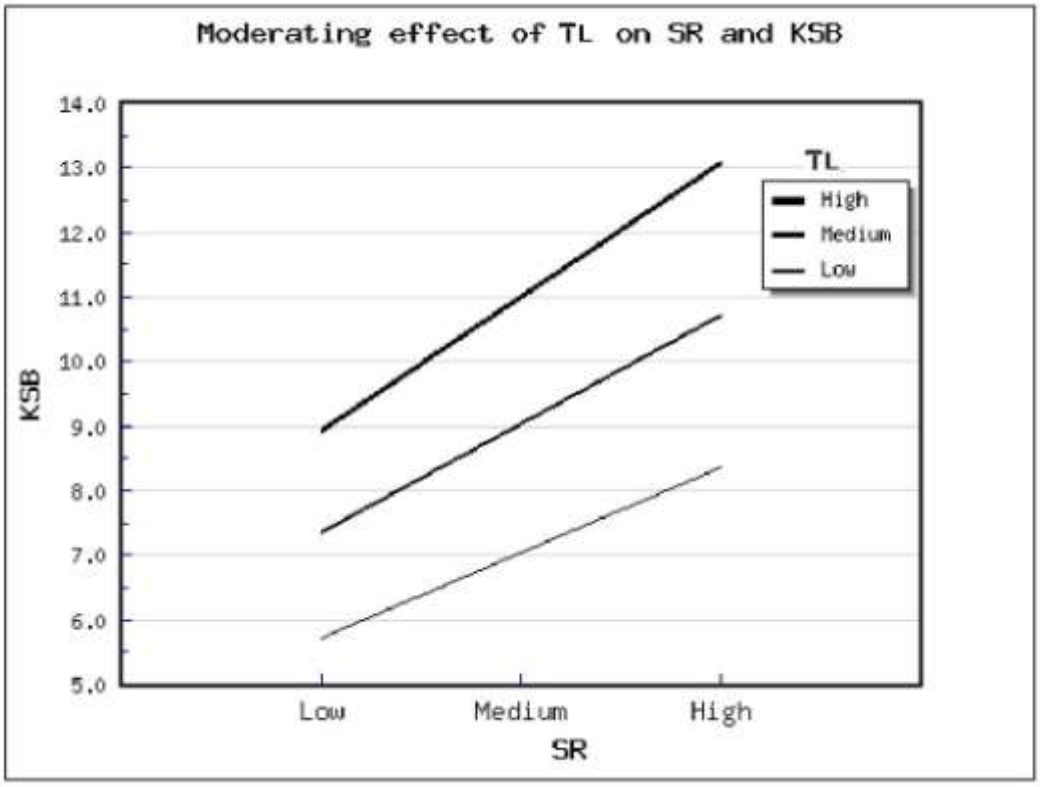

Figure 4. 2: Modgraph for moderating of Transformational leadership on the relationship between Self regulations and Knowledge Sharing Behaviour.

The interaction plot in Figure 4.2 displays an enhancing effect that as self-regulation and transformational leadership increases, knowledge sharing behaviour increases in all levels as depicted by the steepness of the slope. Thus the hypothesis was rejected. Transformational leadership strengthens the correlation.

4.12.9 Modgrap for Moderating Effect of Social-Skills and Knowledge Sharing Behaviour

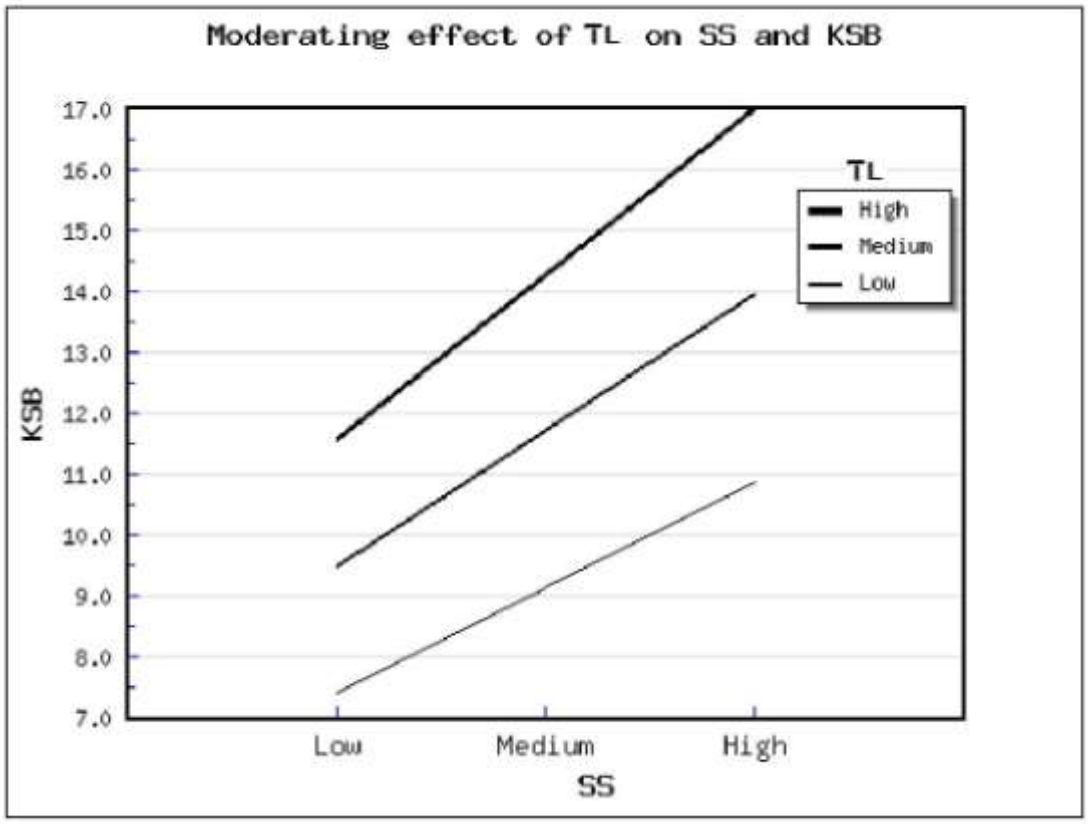

Figure 4. 3: Modgraph for moderating of Transformational leadership on the relationship between Social Skills and Knowledge Sharing Behaviour.

However, interaction plot in Figure 4.3 displays an enhancing effect that as socialskill and transformational leadership increases, knowledge sharing behaviour increases in all levels as depicted by the steepness of the slope. Thus the hypothesis was rejected. Transformational leadership strengthens the correlation.

4.12.10 Modgrap for Moderating Effect of Interpersonal Skills and Knowledge Sharing Behaviour

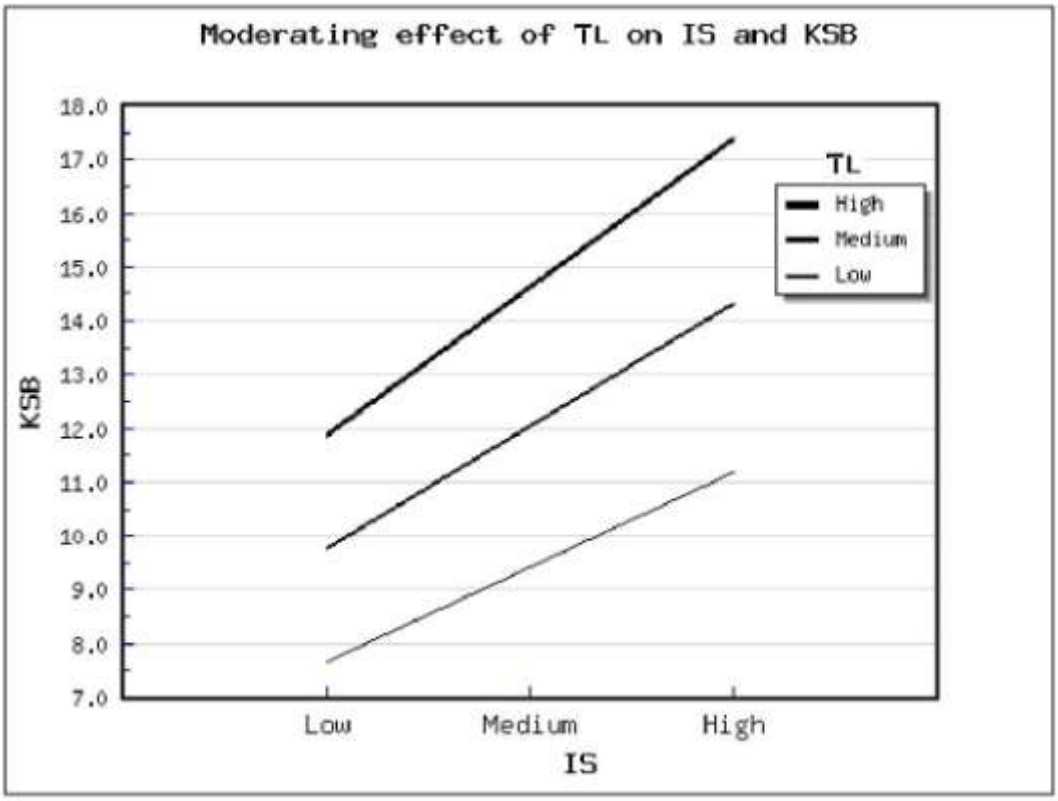

Figure 4. 4: Modgraph for moderating of Transformational leadership on the relationship between Interpersonal Skills and Knowledge Sharing Behaviour.

Finally, as concerns the moderating effect, Figure 4.4 reveals an enhancing effect that as interpersonal skills and transformational leadership increases, knowledge sharing increases in all levels high as indicated by the steepness of the slopes. So, the hypothesis was not supported. Thus, transformational leadership strengthens the relationship.

4.13 Summary of Hypotheses Testing Results

The results presented in Table below 4.31 indicated the summary of both multiple and hierarchical regression models. Thus, the table shows (R^2) and Δ in (R^2) for both main and interaction effects as well as the decision on the formulated hypothesis.

Table 4. 30: Summary of Hypotheses Testing Results

Hypothesis Formulated	Beta (β)	ρ – values	Decision	R^2
Main Effects				
H_{O1}: There is no significant effect of emotional self-awareness on knowledge sharing behavior in Kenyan universities	0.37	0.02	Rejected	**.66**
H_{O2}: There is no significant effect of self-regulation on knowledge sharing behavior in Kenyan universities.	0.11	0.00	Rejected	
H_{O3}: There is no significant effect of social skills on knowledge sharing behavior in universities in Kenya	0.10	0.01	Rejected	
H_{O4}: There is no significant effect of interpersonal relations on knowledge sharing behavior in Kenyan universities	0.18	0.01	Rejected	
H_{O5}: There is no significant effect of humility on knowledge sharing behavior in Kenyan universities	0.30	0.00	Rejected	
Moderation – Transformational leadership				**$R^2\Delta$**
H_{O6a}: There is no significant effect of the moderating role of transformational leadership on the relationship between interpersonal relations and knowledge sharing behavior in Kenyan universities	1.195	.000	Moderated	0.32
H_{O6b}: There is no significant effect of the moderating role of transformational leadership on the relationship between emotional self-awareness and knowledge sharing behavior in Kenyan universities	.483	.000	Moderated	0.01
H_{O6c}: There is no significant effect of the moderating role of transformational leadership on the relationship between social skills and knowledge sharing behavior in Kenyan universities	.631	.000	Moderated	0.01
H_{O6d}: There is no significant effect of the moderating role of transformational leadership on the relationship between interpersonal relations and knowledge sharing behavior in Kenyan universities	.624	.000	Moderated	0.02
H_{O6e}: There is no significant effect of the moderating role of transformational leadership on the relationship between humility and knowledge sharing behavior in Kenyan universities	0.01	.964	Not Moderated	0.00

*Level of significance, *p< .05,*

Key: Moderated: means positive and significant

Not moderated: means positive and insignificant

Source: Research Data, (2019)

4.14 Discussion of the Findings

A number of sequential hierarchical multiple regression models were used to test the proposed hypotheses and to analyze the relationships. Hypotheses of the study were at 5% level of significance. The beta coefficients indicate the slope of the model that relates the independent variables to the dependent variables (Dunn, 2001).the size of the beta coefficient indicates the magnitude of the influence of the dependent variable whereas the t-test was used to compare the regression coefficient beta (β) with 0. Standardized coefficients were used to explain the hypothesis tested. The discussions of the findings are based on both literature and empirical results of hypothesis presented in chapter one which provided basis for explanation as to why the hypothesis were supported or not.

4.14.1 Effect of Self-Awareness on Knowledge Sharing Behavior

Self-awareness had a positive and significant effect on knowledge sharing behaviour ($\beta = 0.37$, $p<0.05$). The implication is that, good self-awareness enhances knowledge sharing behaviour among universities staff. In regards to the effect of self-awareness on employee knowledge sharing, the findings suggested that workers who have strong self-awareness are usually realistic in what they can and cannot do thus improving the quality of knowledge sharing. Self-aware workers are normally not self-critical or naively hopeful so they don't spend a lot of time criticizing themselves being too ambitious.

Self-awareness empowers employees to do self-reflection and be thoughtful thus staffs evaluate themselves from time to time. Self-aware people typically find time to reflect quietly on their ways of life and performance and improve were they fall short.

Self-aware people are able pre-think things over before taking any actions and this enables them make better decisions and judgments which improves the quality of their performance and knowledge sharing. This confirmed the study of Victoroff and Boyatzis (2012) that reported that self-awareness has enable employees to know themselves and thus recognized their behaviours when under the spot light and this in return enabled them to direct their behaviours towards achieving their set targets. Being self-aware also enables the employees to constantly remain conscious both as individuals and when in teams and this has been a very big factor to their positive knowledge sharing.

The findings also concurred with Cheok and O"Higgins (2011) who discovered that self-aware employees are in a much better position to recognize, understand and control their emotions and as a result they respond to situations in a more professional and objective manner hence a better and improved performance in knowledge sharing. Leadership is intrinsically an emotional process, whereby leaders recognize followers' emotional states. As Mayer *et al.*, (2000) argue, a high level of emotional intelligence enables a leader to be better able to monitor how workgroup members are feeling and to take appropriate action. People in leadership positions need to demonstrate and spread positive emotions (Prati *et al.,* 2003) and lack of emotional control has been found to be associated with leadership ineffectiveness (Goleman, 1998b).

4.14.2 Effect of Self-Regulation on Knowledge Sharing Behaviour

Self-regulation had a positive and significant effect on knowledge sharing behaviour ($\beta = 0.11$, $p<0.05$). The implication is that, good self-regulation enhances knowledge sharing behavior among universities staff. The finds suggested that management can make use of persons who possess emotional self-regulation to ensure that they always

are in control of their disturbing emotions and impulses for purposes of their own benefit hence enabling them to perform better. The study also revealed that self-regulation positively contributes to good leadership and management because leaders who are transparent live their values, and where necessary they openly admit mistakes and fault and this way it makes it easy to correct the mistakes and improve on knowledge sharing of staff.

The study concurred with Bock and Kim (2012) who proposed that self-regulation could be treated as a major factor of self-motivational source for knowledge sharing. Their discoveries disclose that the individual's judgment of his/her contribution to organization performance has a positive influence on knowledge sharing. Its backed up by McPheat (2010) who stated that self-regulation enables employees to take responsibility for their own behaviours, mistakes and in general emotions and understand how these aspects impacted on their daily lives and performance through the so many decisions that have to be made in their lives instead of blaming others for mistakes they make or constantly defending themselves.

Emotional intelligence is a critical component of leadership effectiveness, particularly as leaders deal with teams and workgroup members. Emotionally intelligent leaders serve as a benefit to teams in two ways. Leaders motivate team members to work together towards team goals. Leaders also serve as a transformational influence over team members. In this manner, leaders challenge the members of the team to work towards increasing team effectiveness and performance, facilitate team member interaction dynamics, build interpersonal trust and inspire members to implement the articulated vision (Goleman *et al.,* 2002).

4.14.3 Effect of Social Skill on Knowledge Sharing Behaviour

Social skill had a positive and significant effect on knowledge sharing behaviour ($\beta = 0.10$, $p<0.05$). The implication is that, good self-regulation enhances knowledge sharing behaviour among universities staff. The study findings indicates that Social skill empowers employees to understand the power of creating useful and healthy networks at work places to create a friendly work environment which they use to improve their own performance. Social skill does also equip employees with the necessary skills to relate and interacts with work colleagues from diverse backgrounds hence improving the collaboration and coordination which in return boost KSB.

As a result of social skill employees have clear minds to enable them assess client's needs and then develop strategies to ensure that these needs are met and satisfied to their expectation. Majority of the staff who participated in the study agreed or strongly agreed that social skill enabled employees to understand a wide range of emotional signals and this let them sense the felt, unspoken, emotions in their work colleagues or group thus supporting improved employee knowledge sharing.

This enables employees to understand the good and bad times of colleagues and is able to avoid a lot of conflict at work place. The finding agreed with McPheat (2010) who stated that seeing things from others point of view enables employees to take actions or make decisions after understanding their view and those of others thus objective decisions are made without any bias but rather consideration and empathy which improves the quality of performance.

The study also agreed with Kalling & Styhre (2003) in their opinion, the transfer of knowledge is taking place within the organization as a natural routine either when the

members of the organization communicate with each other or work together. Leadership is intrinsically an emotional process, whereby leaders recognize and manage follower's emotional states (Humphrey, 2002) and where emotional intelligence is viewed as an important determinant of effective leadership (Ashkanasy and Tse, 2000).

4.14.4 Effect of Interpersonal SKills on knowledge Sharing Behaviour

Interpersonal skills had a positive and significant effect on knowledge sharing behaviour ($\beta = 0.18$, $p<0.05$). The implication is that, good interpersonal skills enhance knowledge sharing behaviour among universities staff. Inspirational employees ensure to assess and analyze the tasks that they intend to assign to others to ensure that it's in line with the companies vision and ensure to clearly communicate missions so that either subordinates or work colleagues get motivated enough to perform. interpersonal managements builds leaders and staffs that are good at cultivating people's abilities, show a genuine interest in those they are helping along to understanding their goals hence enabling employees work towards achieving set goals and targets by aligning the individual goals to that of the work place thus performance and knowledge sharing improvement being the final outcome.

Employees with the interpersonal management skills are able to recognize the need for change and then manage the change exercise in an effective manner. The findings concurred with Yang and Lai (2011), emphasize the potential usefulness of knowledge transferred to others. Thus understood, knowledge sharing as a process by which an individual imparts his or her expertise, insight, or understanding to another individual so that the recipient may potentially acquire and use the knowledge to perform his or her task(s) better. The ways in which knowledge may be transferred to

other employees include, for example, e-mail, conferences, chats, internet sites, seminar presentations, mentoring, and meetings.

Collectively there are several empirical research studies confirming the argument that emotional intelligence is positively related to transformational leadership greatly contributing to job performance and leadership. These studies in over 200 companies and organizations worldwide suggest that about one-third of this difference is due to technical skill and cognitive ability while two-thirds is due to emotional competence (Goleman, 2010).

Zwingmann *et al.,* (2014) found that employees led by a transformational leader have better health than those led by a laissez-faire (apathetic, hands-off) leader. They added that having a clear, shared vision that gives meaning to work is a "health-promoting phenomena" in the workplace. Transformational leadership has three basic functions. First, transformational leaders sincerely serve the needs of others, empower them and inspire followers to achieve great success. Secondly, they charismatically lead, set a vision, and instill trust, confidence, and pride in working with them. Finally, with intellectual stimulation, they offer followers of the same caliber as the leader (Castanheira & Costa, 2011).

4.14.5 Effect of Humility on Kknowledge Sharing Behaviour

Humility had a positive and significant effect on knowledge sharing behaviour ($\beta = 0.300$, $p<0.05$). The implication is that, good humility enhances knowledge sharing behaviour among universities staff. Most of the respondents agreed or strongly disagreed that humility among employees encourages good relationship which in general enhances employee performance and knowledge sharing among the

Universities staff. This was backed up by Crossan *et al.,* (2008) which states that humility in organizations, is an an idea whose time has come. In light of anticipated challenges and changes that continue to unfold in the 21st century, scholars in public and private institutions have suggested a greater need for organizational members to have the humility to acknowledge areas of ignorance and inexperience and to foster the learning and adaptation that will be required to succeed in an increasingly unpredictable workplace.

4.14.6 Moderating effect of Transformational Leadership

The study established that transformational leadership positively moderates the relationships between self-awareness and knowledge sharing behaviour ($\beta = 1.195$, $\rho<0.05$), self-regulation and knowledge sharing behaviour ($\beta = 0.483$, $\rho<0.05$), social skill and knowledge sharing behaviour ($\beta = 0.631$, $\rho<0.05$), interpersonal skills and knowledge sharing behaviour ($\beta= 0.624$, $\rho<0.05$). however, the results also indicate that there is a positive and insignificant moderating effect of transformational leadership on the relationship between humility and knowledge sharing behaviour ($\beta = 0.01$, $\rho>0.05$).Generally the results are consistent with the results, (Yu& Jantzi, 2012) concluded that transformational leaders in the education industry were seen to be responsible for laying the foundation for changes in the organizational culture, strategies and even structures that are similar to any other corporate setting. Strategies may include the development of employees to attain a higher professional level that will directly increase their capabilities, innovativeness and give more empowerment to their subordinates to shape initiatives that will bring about the much-needed changes.

These findings were also backed up by Limsili & Ogunlana (2008), found that transformational leadership helped facilitate both organizational commitment and employee productivity. Zwingmann *et al.,* (2014) concurred with the findings that employees led by a transformational leader have better health than those led by a laissez-faire (apathetic, hands-off) leader.

They added that having a clear, shared vision that gives meaning to work is a "health-promoting phenomena" in the workplace. Castanheira & Costa, (2011) tallying with the findings found that transformational leadership has three basic functions. First, transformational leaders sincerely serve the needs of others, empower them and inspire followers to achieve great success. Secondly, they charismatically lead, set a vision, and instill trust, confidence, and pride in working with them. Finally, with intellectual stimulation, they offer followers of the same caliber as the leader. Chen, *et al.,* (2004) also agreed with the findings as they examined the relationship between leadership behaviours and knowledge sharing in professional service firms in Taiwan and the United States.

The results showed transformational leadership behaviours as a significant predictor of internal knowledge sharing, and Contingent reward leadership behaviours are significantly and positively correlated with both internal and external knowledge sharing. In addition, Constant *et al.,* (1994) argued that experienced workers learned that they should share their knowledge which was acquired from their work and training.

CHAPTER FIVE

SUMMARY OF FINDINGS, CONCLUSION AND RECOMMENDATIONS

5.0 Overview

This chapter summarizes the research findings and the conclusions drawn. First a summary of the findings as they relate to each of the specific objectives are discussed. These are evaluated on the basis of the research questions and the purpose of the study and conclusions drawn. The chapter then discusses the recommendations. Limitations of the study and recommendations for further research in the subject area presented in the last sections. The structure of the chapter was guided by the research questions, study objectives and the hypotheses tested.

5.1 Summary of Findings

The purpose of the study was to determine the effect of emotional intelligence and transformational leadership on knowledge sharing behaviour on academic staff in Kenyan Universities. The study had the following as research objectives: To determine the effect of self-awareness on knowledge sharing behavior, establish the effect of self-regulation on knowledge sharing behavior, assess the effect of social skills on knowledge sharing behavior, analze effect of interpersonal skills on knowledge sharing behaviour, investigate effect of humility on knowledge sharing behavior and to examine the transformational leadership on knowledge sharing behaviour.

The findings of this research are presented in chapter four. A summary of the findings based on the study objectives are presented in this section. Implications and meaning of the findings in relation to knowledge sharing behaviour of universities in Kenya are

discussed. The findings show a positive and moderately strong relationship between transformational leadership, emotional intelligence and knowledge sharing behaviour among academic staff in Kenyan universities. What these findings mean is that the leaders of universities in Kenya exhibit transformational leadership characteristics which influence employees in a way that is intellectually challenging, inspirational, and sensitively considerate and express a mission that is representative of their collective goals that are associated with productive organizations.

5.2 Conclusions of the Study

Based on the findings it is concluded that self-awareness results leads to improved employee knowledge sharing. Workers who had strong self-awareness were realistic in whatever choices they make and in doing their work. From the findings the aspect of self-awareness serving as a basis for self-reflection and thoughtfulness had a marginal correlation with knowledge sharing behaviour, Self-aware people typically find time to self-evaluate had a significant effect on performance and knowledge sharing, and Universities management in Kenya needs to find a way of encouraging its employees to think things over rather than react impulsively.

Improving employee's self-regulation abilities result in improved employee performance and knowledge sharing which then leads to the attainment of overall organizational performance. The study showed that persons who possess self-regulation skills are in control of their emotions and ensure these emotions are effectively managed to avoid it affecting their work and persons they relate and work with daily to ensure improved output and healthy work environment relationships.

The study also concludes that employees who were transparent lived their values, and where necessary they openly admitted to their mistakes which were then corrected for improved later performances. Employees are able to put more energy in achieving and ensuring high standards at work place through proper self-management abilities and this positively affects employee's performance. The findings also indicated that employees who are achievement oriented are interested in continually learning, teaching and want to do things better and this is a pre determinant for the attainment of better performance. Optimistic employees are able to roll with the punches, see opportunities rather than threats in setbacks and use this to improve their performance and motivation from the challenges presented.

Improving the social skills of employees in the company would result in improved employee performance and knowledge sharing and in general improved organizational performance. As noted, social kills enabled employees to recognize a wide range of emotional signals and this enabled them to sense the felt, unspoken, emotions in fellow employees or groups and handled it before it exploded to affect knowledge sharing and performance. Social skills enabled employees to detect crucial social networks and understand key power relationships and know how to use this to improve knowledge sharing. Social skills also made it possible for employees to get along with people of diverse backgrounds and abilities. Due to social skills, employees are in better position to understand customer's or client's needs and strive towards satisfying this needs through continuous interaction with this beneficiaries which then leads to achieving both personal and organizational goals.

Any expense the company incurs to improve the interpersonal management abilities of staffs will definitely result in improved staff knowledge sharing behaviour and

overall organization achievement of its goals and objectives. Interpersonal management skills build up leaders who are able to examine what they ask their subordinates to implement and ensure that these very people they lead share in the same vision for purposes of sense of belonging thus knowledge sharing and performance improvement. Knowledge sharing behaviour improvement in the company is possible due to employee's ability to encourage and model change process towards an acceptable and productive result whenever necessary and required. The study concluded that employees who are able to manage conflict effectively and are humble and able to avoid unnecessary explosion of problems at work places throughout the organization and thus employee's energies are directed towards improving performance and knowledge sharing for both individuals and general organizational performance as well as providing mentorship.

Conclusively from the results, the study found that Self Awareness, Self-Regulation, Social Skills, Interpersonal Skills and Humility all have positive effects on Knowledge Sharing Behavior. The study argues that academic staff who are Self-Aware, have relevant expertise, realistic in whatever choices they make and improved Knowledge Sharing Behavior. The study further showed that persons who possess Self-Regulation skills are in control of their emotions and ensure these emotions are effectively managed for a health work environment. Also Social skills enabled employees to detect crucial social networks and understand key power relationships in order to improve knowledge sharing Behavior. In addition, the study notes that Interpersonal Skills builds up leaders who are able to examine their subordinates in order to implement and share in the same vision for purposes of sense of belonging thus knowledge sharing. Finally, from the results of this study, transformational

leadership has a positive relationship with organizational performance of universities in Kenya.

Finally, from the results of this study, transformational leadership has a positive relationship with organizational performance of universities in Kenya. Despite the lack of relevant criteria for the measure of performance of universities in Kenya, the study showed support for both theory and research this in fact is supported by the transformational leadership theory which emphasizes that, creating high-performance workforce has become increasingly important and to do so business leaders must be able to inspire organizational members to go beyond their task requirements.

As a result, new concepts of leadership have emerged. Transformational leadership being one of them. The current environment characterized by uncertainty, global turbulence, and organizational instability calls for transformational leadership to prevail at all levels of the organization. The followers of such leaders demonstrate high levels of job satisfaction and organizational commitment, and engage in organizational citizenship behaviors. With such a devoted workforce, it will definitely be useful to consider making efforts towards developing ways of transforming organization through leadership across the leadership continuum.

Transformational leadership may be found at all levels of the organization: teams, departments, divisions, and organization as a whole. Such leaders are visionary, inspiring, daring, risk-takers, and thoughtful thinkers. They have a charismatic appeal. But charisma alone is insufficient for changing the way an organization operates. The results of this study calls on the top leadership of universities in Kenya to avail themselves to the range of transformational leadership characteristics of attributed charisma, idealized influence, intellectual stimulation, inspirational motivation and

individualized consideration as these behaviours are critical to the success of universities.

Transformational leaders guide followers by providing them with a sense of meaning and challenge. They work enthusiastically and optimistically to foster the spirit of teamwork and commitment. They encourage new ideas from their followers and never criticize them publicly for the mistakes committed by them. The leaders focus on the "what" in problems and do not focus on the blaming part of it. They have no hesitation in discarding an old practice set by them if it is found ineffective. The leaders act as role models that followers seek to emulate. Such leaders always win the trust and respect of their followers through their action. They typically place their followers needs over their own, sacrifice their personal gains for them, ad demonstrate high standards of ethical conduct. The use of power by such leaders is aimed at influencing them to strive for the common goals of the organization.

They act as mentors to their followers and reward them for creativity and innovation. The followers are treated differently according to their talents and knowledge. They are empowered to make decisions and are always provided with the needed support to implement their decisions.

The continuum of Leadership Behavior (Tannenbaum and Schmidt, 1973). Their work suggests a continuum of possible leadership behavior available to a manager and along which many leadership styles may be placed. The continuum presents a range of action related to the degree of authority used by the manager and to the area of freedom available to non-managers in arriving at decisions. According to this approach, if one has to make a choice of the leadership style which is practicable and desirable, then the answer will depend upon the following three factors: *Forces in the*

Manager: The behavior of the leader is influenced by his personality, background, knowledge, and experience. These forces include: Value systems Confidence in subordinates Leadership inclinations Feelings of security in an uncertain situation *Forces in the subordinate:* The personality of the subordinates and their expectations from the leader influences their behavior.

The factors include: Readiness to assume responsibility in decision-making Degree of tolerance for ambiguity Interest in the problem and feelings as to its importance Strength of the needs for independence Knowledge and experience to deal with the problem Understanding and identification with the goals of the organization If these factors are on a positive side, then more freedom can be allowed to the subordinate by the leader. *Forces in the situation*: The environmental and general situations also affect the leader's behavior. These include factors like: Type of organization Group effectiveness Nature of the problem Time pressure. According to Tannenbaum and Schmidt, successful leaders know which behavior is the most appropriate at a particular time. They shape their behavior after a careful analysis of self, their subordinates, organization, and environmental factors.

The Leadership Continuum Theory represents a just and valuable framework for analyzing leadership style. The positive findings show that the top leadership of universities in Kenya has taken a leading role in ensuring the effectiveness of their universities thus disapproving the notion by Pounder (2001) that, the assumption to leadership in universities is based on research rather than on competence and training. Its therefore, concluded that, despite university leadership in Kenya largely comprising of academic leaders, these are not removed from practical realities of their environment.

5.3 Contributions of the Study

This study contributes to Theory, Practice, policy and Methodology

5.3.1 Contribution to Theory

In conclusion, this study contributes to the extant literature of emotional intelligence and Knowledge sharing behavior in the Kenyan context. Moreover, despite the abundant literature, to the author's best knowledge, no studies have examined the linkages between emotional intelligence, transformational leadership and knowledge sharing behavior in a single study. Where Transformational leadership contributes at R square of 81%. This study, therefore, is the first of its kind to be commenced in the Kenyan context. Further, this study spurs other scholars to continue this investigation into emotional intelligence and Knowledge Sharing behaviour in cross-cultural context.

Emotional intelligence has obtained more interest recently in knowledge-based disciplines. Limited studies have empirically examined the moderating role of emotional intelligence in knowledge sharing (Wang & Noe, 2010a), although the research proposing that individuals are inclined to particular work attitudes and behaviours (Judge & Bono, 2001). As such, Hess and Bacigalupo (2011) point out that there is little contribution to how the behaviours associated with emotional intelligence (Hess & Bacigalupo, 2011). Given its weight and the significance of knowledge activities in Kenyan universities, this study, therefore, offers extended research on Knowledge Sharing Behavior from personality dimension by examining the moderating role of transformational leadership revealed how it strengthens relationship between emotional intelligence and Knowledge Sharing behaviour.

5.3.2 Contribution to Practice

The pattern of Emotional Intelligence are not fixed so, by influencing the behaviour of employees the managers can achieve the organizational goals. However, with the application of Knowledge Management results in innovative efforts by the organization can enhance its productivity and can also promote the human resource management in the organization. Moreover, when the knowledge of employees flourished, such excessive asset will create the background for organizational learning to accomplish the organizational objectives furthermore, productivity of organization will boost up. Current study provides the insight to the managers on how to maintain their degree of emotional intelligence and knowledge to achieve the competitive gains.

From the findings of this study, it is observed that the emotional intelligence of the academic staff has a significant association with knowledge sharing behavior. Most of the researches reveal that emotional intelligence predicts success at all works of life. Hence, the executives working in organizations needs emotional intelligence skills to work more effectively to impart knowledge to their sub-ordinates as well as to maintain a cordial relationship with others in the organization. Emotional intelligence & leadership are two important correlates of which knowledge sharing behavior provides the context in which emotional intelligence operates and hence it is imperative to promote both qualities among the executives. From the findings it is suggested that emotional intelligence and leadership training programmes to be organized for the executives at all levels. Moreover, the emotional intelligence should be considered as an important criterion in the selection of executives.

Also Universities and Management will derive the insights on the key competencies by serving as a benchmark for universities that have not effectively addressed strategic knowledge sharing behavior. Where Scholars and Professionals will contribute to literature on the importance of emotional intelligence and knowledge sharing behavior and to enhance and provide avenues for further research in future by adding to the body of knowledge.

5.3.3 Contribution to Research Methodology

The study was of its kind in targeting academic staff from Kenyan context. Factor analysis conducted provided high cumulative variations of emotional intelligence dimensions. Further, the statistical analyses substantiating the merits of the construct foundational for this study needs to be translated into business and organizational terms readily applied to meet transformational and change aspects of both the competitive and technical organizational demands of this 21st Century. Since this study adopted an explanatory method of data collection using explanatory research design, it may fully capture the dynamism of the formation of employees' knowledge sharing intentions. Further, by use of hierarchical regression method, the study provides a new perspective of research on emotional intelligence and knowledge sharing behavior.

5.3.4 Contribution to Policy

Top leaders have relationships with people from various areas. Networking is important at this level since they can handle these situations easier if they are good at social interactions. Leaders have the highest emotionality level, because they have to perceive and express emotions, develop and sustain close relationships both with other leaders and their office employees. They have a wide range of emotion-related

skills. The reason why self-control of leaders was higher than that of their employees from other positions is that leaders have to adapt to upper and lower organisational levels as well. On the other hand, the higher an employees' position, the less afraid they were to lose knowledge. However, office workers were willing to share knowledge in favour of their reputation. The background reason can be that they also lose their competitive advantage over others. This advantage can help them progress, get promotions, improve in the future, etc. Top leaders of universities can therefore ensure this by making sure that they are not worried about losing their knowledge and they are the least interested in organizational reward and make policies that are friendly to academic staff.

Policymakers & Decision Makers will formulate policies that promote in understanding the important role played by emotional intelligence and transformational leadership in improving knowledge sharing behavior by cultivating, nurturing and facilitating their formation.

5.3.5 Contribution to new knowledge

The study extended new knowledge by examining Emotional intelligence and Knowledge Sharing Behavior in Kenyan Universities. By investigating the moderating effect of Transformational Leadership on the relationship between Emotional Intelligence and Knowledge Sharing Behavior in Kenyan Universities. This study provides the insight to the management of universities on how to maintain their degree of emotional intelligence and knowledge to achieve their competitive gains. Since intelligence matters in the management of universities and leaders should embrace it for greater knowledge sharing behavior. Thus this study unearth the

unmasked epitome of knowledge sharing behavior in Kenyan universities as an ongoing academic debate.

5.3.6 Practical Implications for the study

5.3.6.1 Emotional Intelligence Implications

Over the years, the emotional intelligence which is also known as EQ has developed into an ability one must have. Research indicates that the best predictor of success is emotional intelligence, and that the most successful leaders are all similar in one key way: they all have a high degree of what has become known as emotional intelligence. It's not that there is irrelevance to IQ and technical skills.

They do matter, but they are the criteria of entry-level executive roles.

5.3.6.2 Theoretical implications

This study supports the theories proposition that for a University to be effective, it has to exchange and share knowledge intelligently. Also it provides an extended research on Knowledge Sharing Behavior from Knowledge perspective by examining the moderating role of transformational leadership.

5.3.6.3 Managerial and Policy Implications

Leaders have relationships with people from various areas and Networking is important at this levels since they can handle these situations easier if they are good at social interactions by perceiving and expressing emotions, developing and sustaining close relationships both with other leaders and their office employees.

Additionally, the results suggests that Emotional intelligence and leadership are two important correlates of which knowledge sharing behavior provides the context in

which emotional intelligence operates and hence it is imperative to promote both qualities among the university academic staff.

5.3.6.4 Leadership Implications

Employees with a high degree of emotional intelligence are more likely to remain calm under pressure, efficiently resolve disputes and react empathically to coworkers. Leaders set organisation's tone. If they lack emotional intelligence, the effects may be more far-reaching, resulting in lower employee engagement and a higher turnover rate. Although you may technically excel at your work, if you are unable to interact efficiently with your team or collaborate with others, you may lack those technical skills. You will continue to advance your career and organisation, by mastering emotional intelligence.

5.3.6.5 Knowledge Sharing Implications

Emotional intelligence encourages individuals to share their information and one of the variables that plays a significant role in shaping their attempts to share knowledge. It has drawn much interest in research from both practitioners and researchers over the past two decades and has become one of the frequently debated academic research topics in the fields of psychology, education and management. (Pradhan & Nath, 2012).

5.4 Recommendations of the Study

In terms of practice, the findings of this study are useful to the leadership of Kenyan universities in the formulation of strategies for improving performance and in developing leadership training policies for universities in Kenya. Therefore, the study recommends that the top leadership of universities in Kenya and their institutions may experience increased knowledge sharing behaviour if they focused their time on

learning about transformational leadership. Training in leadership is known to enhance organizational effectiveness and performance. Given the dynamic environment in which universities in Kenya operate and the challenges facing the top leadership, the success of these institutions will require leadership skills and competences in transformational leadership through well-developed leadership training programmes.

The study recommended that Universities in Kenya needs to help its staff to improve on their self-awareness if they need improved employee knowledge sharing. The universities needs to focus on developing workers to have strong self-awareness so that they can be realistic in whatever choices they make and in doing their work. Self-aware workers should be encouraged to refrain from expressing themselves anyhowly and being over self-critical or naively hopeful in doing their work. Self-awareness should serve as a tendency for self-reflection and thoughtfulness. Self-awareness needs to be encouraged and promoted so that the employees are in a better position to evaluate their actions and make very informed decisions.

The study further recommends to Universities in Kenya that they should optimize staff's self-regulation abilities such as; how employee can figure out their emotional feeling, how they can stand up for their rights if they are to improve employee performance and knowledge sharing which will then lead to the attainment of overall organizational performance.

Emotional self-regulation which is one of the aspects of self-management needs to be managed by management leadership to endeavor employees to be in control of their emotions and ensure these emotions are effectively managed to avoid it affecting their work and persons they relate and work with them daily to ensure improved output and

healthy work environment relationships. Transparency needs to be highly promoted so that staff can live their values, and where necessary they can openly admit mistakes and fault which can be corrected for improved later knowledge sharing and performances. Universities in Kenya needs to develop and recognize employees who constantly struggle to achieve something and ensure high standards at work place through proper self-regulation abilities. Achievement oriented leaders are recommended because they are interested in continually learning and teaching, wants to do things better and this is good for the attainment of general organizational objective of better performance.

The study recommends that since interpersonal management skills build up leaders who are able to examine what they ask their subordinates to implement and ensure that these very people they lead share in the same vision for purposes of a sense of belonging thus knowledge sharing and performance improvement, the human resource department needs to make this part of the recruitment process and desired quality in the company's ideal leaders. Knowledge sharing behaviour and Performance is boosted by the ability of employees or leaders to cultivate people's abilities and showing a genuine interest in those under their leadership by helping and understanding their goals thus the need by Universities management to ensure that the company's vision and missions are clearly shared with all the employees up to the very last person in the company. Knowledge sharing improvement in the company is possible due to employee's ability to encourage and model change process towards an acceptable and productive results whenever necessary and required. Therefore, Universities in Kenya are recommended to train its employees to manage and view change from a transformative angle.

5.5 Suggestions for Further Research

The study only focused on a case of chartered Kenyan Universities which is inadequate to make inference about the effect of emotional intelligence and transformational leadership on knowledge sharing behaviour. Hence further research needs to be carried out on the effect of emotional intelligence on knowledge sharing behaviour and transformational leadership on comparative analysis by even using other moderators in order to compare different universities results. Also a survey can be done in order to obtain specific results specific to a given university based on its nature or location. Further research can be done on colleges,technical institutions and polytechnics in order to obtain confirmatory or divergent views of results.

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APPENDICES

APPENDIX I: INTRODUCTION LETTER

Questionnaire No. ……. Date……..

Dear Respondent

I am a Doctor of philosophy student doing doctor of philosophy in Business Management (DBM), strategic management option. Moi University School of Business and Economics.

This questionnaire, therefore, is intended to help me carry out a research study on **"Emotional intelligence, Transformational leadership, and Knowledge Sharing Behaviour". Among academic staff in universities in Kenya**.

Please provide accurate responses to ALL questions. The information, which you provide in answering this questionnaire, is CONFIDENTIAL and will be used for ACADEMIC purposes. Your honest opinion is very much appreciated.

Biwott Geoffrey
SBE/PGM/034/14

APPENDIX II: QUESTIONNAIRE

SECTION A: GENERAL INFORMATION

Please indicate your responses to the items below by ticking in the boxes or filling in the information needed for each of the statements below.

1. What is your age bracket?
    a) Below 30 years ☐
    b) 31–40 years ☐
    c) 41–50 years ☐
    d) 51 - 60 years ☐
    e) Above 60 Years ☐
2. What is your gender?
    a) Male ☐
    b) Female ☐
3. How many years have you worked at this university?
    a) 5 years or less ☐
    b) 6–10 years ☐
    c) 11–15 years ☐
    d) 16–20 years ☐
    e) More than 20 years ☐
4. What is your highest level of education?
    a) Undergraduate degree ☐
    b) Master's degree ☐
    c) Doctorate degree ☐
    d) Post-doctoral degree ☐
5. What is your title scale in the university?
    a) Graduate assistant ☐
    b) Tutorial fellow ☐
    c) lecturer ☐
    d) senior lecturer ☐
    e) Associate professor ☐
    f) professor ☐

6. Do you have any leadership responsibility at the university? Specify?
    g) Coordinator ☐
    h) Head of the department ☐
    i) Dean ☐
    j) Director ☐
    k) Principal ☐
    l) Deputy principal ☐
    m) Deputy vice-chancellor ☐
    n) Vice-chancellor ☐

SECTION B –Please circle as appropriate.

`The following sections require your candid response against the statements made below where; 1=Strongly Disagree 2= Disagree 3= Neutral 4= Agree 5= Strongly Agree and (SD-Strongly Disagree, D-Disagree, N-Neutral, A-Agree SA-Strongly Agree respectively)

PART A: Knowledge sharing behavior

The objective is to establish the indicators of knowledge sharing behavior

	Knowledge Sharing Behaviour	SD	D	N	A	SA
KS 1.	I accomplish certain tasks through a good attitude and collaboration with other colleagues	1	2	3	4	5
KS 2.	Does perceived behavioral control towards knowledge sharing influence employees actual KSB	1	2	3	4	5
KS 3.	I am willing to share my knowledge and norms with my colleagues freely	1	2	3	4	5
KS 4.	Does attitude towards KS behavior influence employees intention to share knowledge	1	2	3	4	5
KS 5.	When I need certain knowledge I ask my colleagues	1	2	3	4	5
KS 6.	I seek my colleagues' self-efficacy and experience when I need to learn something	1	2	3	4	5
KS 7.	I utilize the available tools to share my knowledge with my colleagues	1	2	3	4	5
KS 8.	I attend and contribute to different knowledge sharing activities	1	2	3	4	5

PART B: Self-awareness

The objective is to determine the effect of self-awareness on knowledge sharing behavior**.**

	Self-awareness	SD	D	N	A	SA
SA 1.	Expressing my emotions is not a problem for me	1	2	3	4	5
SA 2.	I often find it difficult to see things from another person's perspective	1	2	3	4	5
SA 3.	On the whole, I'm a highly motivated person.	1	2	3	4	5
SA 4.	I usually find it difficult to regulate my emotions.	1	2	3	4	5
SA 5.	I have good control of my own emotions.					

PART C: Self-regulation

The objective is to establish the relationship between self-regulation and knowledge sharing behavior.

	Self-regulation	SD	D	N	A	SA
SR 1.	Many times, I can't figure out my emotional feeling.	1	2	3	4	5
SR 2.	I feel that I have a number of good qualities.	1	2	3	4	5
SR 3.	I often find it difficult to stand up for my rights	1	2	3	4	5
SR 4.	I'm usually able to influence the way other people feel.	1	2	3	4	5
SR 5.	On the whole, I have a gloomy perspective on most things	1	2	3	4	5

PART D: Social skills

The objective is to assess the effect of social skills on knowledge sharing behavior.

	Social skills	SD	D	N	A	SA
SS 1.	I generally don't find life enjoyable	1	2	3	4	5
SS 2.	I can deal effectively with people.	1	2	3	4	5
SS 3.	I tend to change my mind frequently.	1	2	3	4	5
SS 4.	I have a good understanding of the emotions of the people around me.	1	2	3	4	5
SS 5.	I am sensitive to the feelings and emotions of others.	1	2	3	4	5

PART E: Interpersonal skills

The objective is to analyze the effect of interpersonal skills on knowledge sharing behavior.

	Interpersonal Skills	SD	D	N	A	SA
IS 1.	I always know my friends' emotions from their behavior.	1	2	3	4	5
IS 2.	I am a good observer of others' emotions.	1	2	3	4	5
IS 3.	On the whole, I'm able to deal with stress.	1	2	3	4	5
IS 4.	I often find it difficult to show my affection to those close to me.	1	2	3	4	5
IS 5.	I'm normally able to "get into someone's shoes" and experience their emotions.	1	2	3	4	5

PART F: Humility

The objective is to ascertain the relationship between humility and knowledge sharing behavior.

	Humility	SD	D	N	A	SA
H 1.	I normally find it difficult to keep myself motivated	1	2	3	4	5
H 2.	I'm usually able to find humility control on others	1	2	3	4	5
H 3.	On the whole, I'm pleased and humbled with my life.	1	2	3	4	5
H 4.	I would describe myself as a humble intellectual	1	2	3	4	5
H 5.	I tend to get involved in things I later wish I could get out of.	1	2	3	4	5
H 6.	I often pause and think about my feelings.	1	2	3	4	5

PART G: Transformational leadership

The objective is to establish the indicators of transformational leadership

	Transformational leadership	SD	D	N	A	SA
TL 1.	The university's leadership is always on the lookout for new idealized influence and opportunities for the organization.	1	2	3	4	5
TL 2.	The university's leadership has a clear vision of its organization that inspires motivation.	1	2	3	4	5
TL 3.	The university's management embraces intellectual stimulation of the company employees.	1	2	3	4	5
TL 4.	The university's leadership always promotes individual consideration as the organization's leading force.	1	2	3	4	5
TL 5.	The university has leaders who are capable of changing and touching and transforming lives for performance	1	2	3	4	5

THANK YOU VERY MUCH FOR YOUR TIME AND CO-OPERATION

APPENDIX III: UNIVERSITY RESEARCH AUTHORIZATION

MOI UNIVERSITY
SCHOOL OF BUSINESS AND ECONOMICS

Tel: (0321) 43620
Fax No: (0321) 43360
Telex No.35047 MOI VARSITY

Box 3900
Eldoret
KENYA

RE: SBE/PGM/034/14 DATE: 17th April, 2019

TO WHOM IT MAY CONCERN

RE: GEOFFREY BIWOTT – SBE/PGM/034/14

The above named is a bonafide student of Moi University School of Business and Economics, undertaking a Doctor of Philosophy in Business Management degree, specializing in Strategic Management.

He has completed coursework, defended his proposal, and is proceeding to the field to collect data for his research titled: *"Emotional Intelligence, Transformational Leadership and Knowledge Sharing Behavior among academic Staff in Kenyan Universities"*

Any assistance accorded to him will be highly appreciated.

Yours Faithfully,

DEAN
School Of Business and Economics
MOI UNIVERSITY

DR. JOEL K. TENAI
Ag. DEAN, SCHOOL OF BUSINESS AND ECONOMICS

APPENDIX IV: NACOSTI RESEARCH AUTHORIZATION LETTER

NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY AND INNOVATION

Telephone:+254-20-2213471,
2241349,3310571,2219420
Fax:+254-20-318245,318249
Email: dg@nacosti.go.ke
Website : www.nacosti.go.ke
When replying please quote

NACOSTI, Upper Kabete
Off Waiyaki Way
P.O. Box 30623-00100
NAIROBI-KENYA

Ref. No. **NACOSTI/P/18/28929/30243**

Date: **27th September, 2019**

Geoffrey Kiprono Biwott
Moi University
P.O. Box 3900-30100
ELDORET.

RE: RESEARCH AUTHORIZATION

Following your application for authority to carry out research on ***"Emotional intelligence, transformational leadership and knowledge sharing behavior among academic staff in Kenyan Universities,"*** I am pleased to inform you that you have been authorized to undertake research in **Nairobi County** for the period ending **23rd May, 2019.**

You are advised to report to **the County Commissioner and the County Director of Education, Nairobi County** before embarking on the research project.

Kindly note that, as an applicant who has been licensed under the Science, Technology and Innovation Act, 2013 to conduct research in Kenya, you shall deposit **a copy** of the final research report to the Commission within **one year** of completion. The soft copy of the same should be submitted through the Online Research Information System.

GODFREY P. KALERWA MSc., MBA, MKIM
FOR: DIRECTOR-GENERAL/CEO

Copy to:

The County Commissioner
Nairobi County.

The County Director of Education
Nairobi County.

APPENDIX V: NACOSTI RESEARCH PERMIT

THE SCIENCE, TECHNOLOGY AND INNOVATION ACT, 2013

The Grant of Research Licenses is guided by the Science, Technology and Innovation (Research Licensing) Regulations, 2014.

CONDITIONS

1. The License is valid for the proposed research, location and specified period.
2. The License and any rights thereunder are non-transferable.
3. The Licensee shall inform the County Governor before commencement of the research.
4. Excavation, filming and collection of specimens are subject to further necessary clearance from relevant Government Agencies.
5. The License does not give authority to transfer research materials.
6. NACOSTI may monitor and evaluate the licensed research project.
7. The Licensee shall submit one hard copy and upload a soft copy of their final report within one year of completion of the research.
8. NACOSTI reserves the right to modify the conditions of the License including cancellation without prior notice.

National Commission for Science, Technology and Innovation
P.O. Box 30623 - 00100, Nairobi, Kenya
TEL: 020 400 7000, 0713 788787, 0735 404245
Email: dg@nacosti.go.ke, registry@nacosti.go.ke
Website: www.nacosti.go.ke

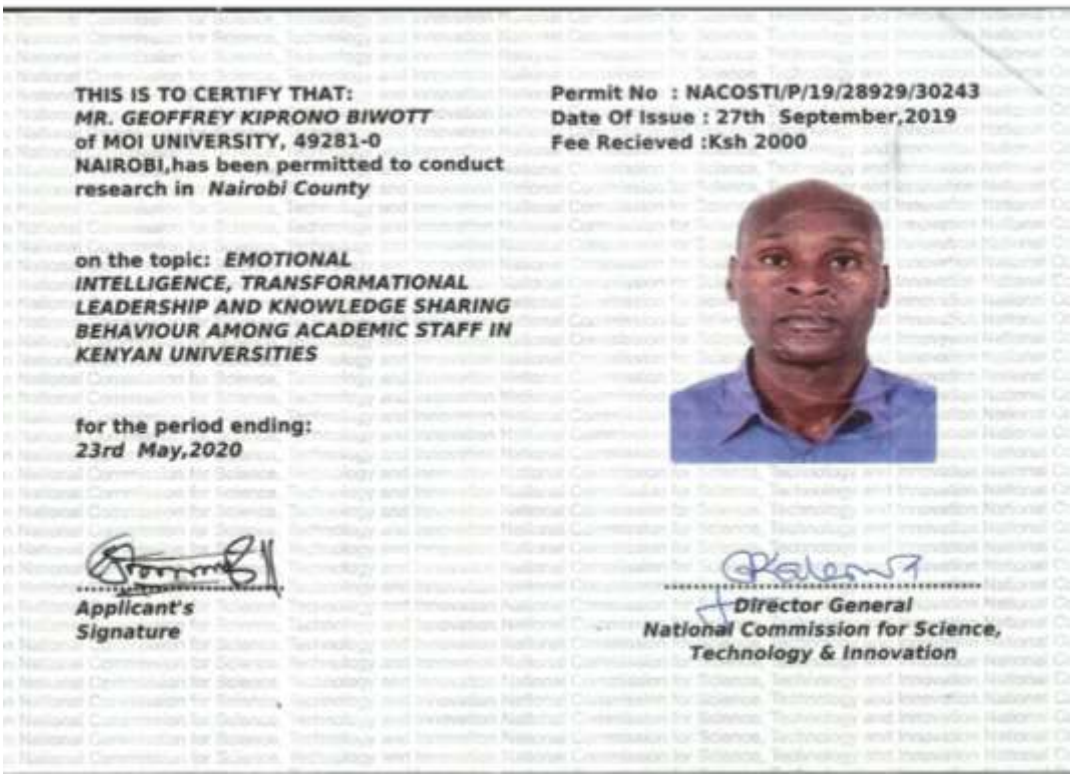
REPUBLIC OF KENYA

National Commission for Science, Technology and Innovation

RESEARCH LICENSE

Serial No.A 26437

CONDITIONS: see back page



THIS IS TO CERTIFY THAT:
MR. GEOFFREY KIPRONO BIWOTT
of MOI UNIVERSITY, 49281-0
NAIROBI,has been permitted to conduct research in *Nairobi County*

on the topic: *EMOTIONAL INTELLIGENCE, TRANSFORMATIONAL LEADERSHIP AND KNOWLEDGE SHARING BEHAVIOUR AMONG ACADEMIC STAFF IN KENYAN UNIVERSITIES*

for the period ending:
23rd May,2020

Permit No : NACOSTI/P/19/28929/30243
Date Of Issue : 27th September,2019
Fee Recieved :Ksh 2000

Applicant's Signature

Director General
National Commission for Science, Technology & Innovation

APPENDIX VI: LIST OF CHATTERED UNIVERSITIES IN KENYA

COMMISSION FOR UNIVERSITY EDUCATION
ACCREDITED UNIVERSITIES- NOVEMBER 2017

No	UNIVERSITY	YEAR OF ESTABLISHMENT	YEAR OF AWARD OF CHARTER
PUBLIC CHARTERED UNIVERSITIES			
1.	University of Nairobi	1970	2013
2.	Moi University	1984	2013
3.	Kenyatta University	1985	2013
4.	Egerton University	1987	2013
5.	Jomo Kenyatta University of	1994	2013
6.	Maseno University	2001	2013
7.	Chuka University	2007	2013
8.	Dedan Kimathi University of	2007	2013
9.	Kisii University	2007	2013
10.	Masinde Muliro University of Science and Technology	2007	2013
11.	Pwani University	2007	2013
12.	Technical University of Kenya	2007	2013
13.	Technical University of Mombasa	2007	2013
14.	Maasai Mara University	2008	2013
15.	Meru University of Science and	2008	2013
16.	Multimedia University of Kenya	2008	2013
17.	South Eastern Kenya University	2008	2013
18.	Jaramogi Oginga Odinga University of Science and Technology	2009	2013
19.	Laikipia University	2009	2013
20.	University of Kabianga	2009	2013
21.	Karatina University	2010	2013
22.	University of Eldoret	2010	2013
23.	Kibabii University	2011	2015
24.	Kirinyaga University	2011	2016
25.	Machakos University	2011	2016
26.	Murang'a University of Technology	2011	2016
27.	Rongo University	2011	2016
28.	Taita Taveta University	2011	2016
29.	The Co-operative University of Kenya	2011	2016
30.	University of Embu	2011	2016
31.	Garisa University	2011	2017
	TOTAL 31		
PUBLIC CONSTITUENT COLLEGES			
32.	Alupe University College	2015	
33.	Kaimosi Friends University College	2015	
34.	Tom Mboya University College	2016	
35.	Turkana University College	2017	
36.	Bomet University College	2017	
37.	Garisa University	2017	
	TOTAL 31		
PRIVATE CHARTERED UNIVESITIES			
38.	University of Eastern African, Baraton	1989	1991

39.	Catholic University	1989	1992
40.	Daystar University	1989	1994
41.	Scott Christian University	1989	1997
42.	United States International University	1989	1999
43.	Africa Nazarene University	1993	2002
44.	Kenya Methodist University	1997	2006
45.	St. Pauls University	1989	2007
46.	Pan Africa Christian University	1989	2008
47.	Kabarak University	2002	2008
48.	Strathmore University	2002	2008
No	UNIVERSITY	YEAR OF ESTABLISHMENT	YEAR OF AWARD OF CHARTER
49.	African International University	1989	2011
50.	Kenya Highland Evangelical	1989	2011
51.	Mount Kenya University	2008	2011
52.	Great Lakes University of Kisumu	2005	2012
53.	Adventist University	2005	2013
54.	KCA University	2007	2013
55.	KAG- EAST University	1989	2016
	TOTAL 18		
PRIVATE CONSTITUENT COLLAGES			
56.	Tangaza University College	1997	
57.	Marist International University College	2002	
58.	Regina Pacis University College	2010	
59.	Uzima University College	2012	
60.	Hekima University College	1993	
	TOTAL 5		
INSTITUTION WITH LETTERS OF INTERIM AUTHORITY			
61.	Aga Khan University	2002	
62.	Kiriri Women's University of Science and Technology	2002	
63.	GRETSA University	2006	
64.	Presbyterian University of Eastern Africa	2007	
65.	The East African University	2010	
66.	Management University of Africa	2011	
67.	Pioneer International University	2012	
68.	Riara University	2012	
69.	UMMA University	2013	
70.	International Leadership University	2014	
71.	Zetech University	2014	
72.	Lukenya University	2015	
73.	RAF International University	2016	
74.	AMREF International University	2017	
	TOTAL 14		

Public Chartered University	31
Public Constituent Colleges	6
Private Chartered University	18
Private constituent Colleges	5
Institutions with Letters of Interim Authority	14
Total	74

Commission for Higher Education (2018)

APPENDIX VII: UNIVERSITY STAFFING BY RANK IN PUBLIC CHATTERED UNIVERSITIES

Annex 21: University Staffing by Rank in Public Chartered Universities

University	professor		Senior Lecturers		Lectures		Assistant Lecturers		Graduate Assistants		Total		**Total**
	M	F	M	F	M	F	M	F	M	F	M	F	
Chuka University	13	3	18	8	65	24	64	48	14	13	174	96	**270**
Dedan Kimathi University of Technology	25	2	28	9	58	10	185	105	42	18	338	144	**482**
Egerton University	77	15	68	27	183	61	68	42	22	7	418	152	**570**
Jaramogi Oginga Odinga University of Science and Technology	19	6	26	4	63	22	10	5	155	72	273	109	**382**
Jomo Kenyatta University of Science and Technology	100	27	81	12	204	91	86	31	104	98	611	259	**870**
Karatina University	9	2	6	4	45	23	7	8	140	90	207	127	**334**
Kenyatta University	77	22	139	67	532	279	42	28	333	183	1,123	579	**1,702**
Kibabii University	19	6	23	9	77	17	63	21	24	14	206	67	**273**
Kirinyaga University	2	2	1	1	11	7	-	-	58	53	72	63	**135**
Kisii University	12	-	44	18	106	44	94	67	22	9	278	138	**614**
Laikipia University	9	2	7	7	37	20	117	55	8	8	178	92	**270**
Maasai Mara University	9	1	10	3	38	13	25	18	184	76	266	111	**377**
Machakos University	8	1	2	-	21	8	46	18	28	27	105	54	**159**
Maseno University	51	9	32	9	119	54	64	23	29	17	295	112	**407**
Masinde Muliro University of Science and Technology	44	4	28	13	133	64	56	31	50	29	311	141	**452**
Meru University of Science and Technology	10	-	6	4	25	12	211	72	3	1	255	89	**344**
Moi University	110	14	127	41	232	116	24	27	191	124	684	322	**1,006**
Multimedia University of Kenya	10	-	5	3	42	20	16	6	3	2	76	31	**107**
Pwani University	15	3	12	8	29	14	64	19	5	3	125	47	**172**
Murang'a University of Technology	5	2	6	2	15	4	59	28	12	3	97	39	**136**

University	professor		Senior Lecturers		Lectures		Assistant Lecturers		Graduate Assistants		Total		**Total**
Rongo University	20	2	23	5	17	13	156	56	41	26	257	102	**359**
South Eastern Kenya University	16	3	15	3	62	18	58	32	26	36	177	92	**269**
Taita Taveta University	3	1	3	1	14	-	10	7	11	6	41	15	**56**
Technical University of Kenya	33	8	27	13	85	70	96	81	99	104	340	276	**616**
Technical University of Mombasa	14	1	18	2	32	9	64	16	194	63	322	91	**413**
The Co-operative University of Kenya	4	1	2	-	9	6	8	1	23	6	46	14	**60**
University of Eldoret	42	9	28	10	83	48	33	22	31	7	217	96	**313**
University of Embu	5	2	5	1	30	12	3	-	10	12	53	27	**80**
University of Kabianga	17	1	8	3	54	24	20	16	47	29	146	73	**219**
University of Nairobi	338	75	280	123	475	217	4	6	140	125	1,237	546	**1,783**
TOTAL	**1,116**	**224**	**1,078**	**410**	**2,896**	**1,320**	**1,753**	**889**	**2,085**	**1,261**	**8,928**	**4,104**	**13,032**

Commission for Higher Education (2018)

APPENDIX VIII: UNIVERSITY STAFFING BY RANK IN PRIVATE CHATTERED UNIVERSITIES

Annex 23: University Staffing by Rank in Private Chartered University

University	Professor		Senior Lecturers		Lectures		Assistant Lecturers		Graduate Assistants		Total		Total
	M	F	M	F	M	F	M	F	M	F	M	F	
Adventist University	20	8	15	2	-	-	-	-	-	-	35	10	**45**
Adventist University	10	5	21	10	40	36	-	-	20	8	91	59	**150**
Africa Nazarene University	2	2	9	4	33	15	-	-	-	-	44	21	**65**
Catholic University of Eastern Africa	5	3	16	4	43	23	21	9	-	-	85	39	**124**
Daystar University	8	2	23	16	26	33	4	5	-	-	61	56	**117**
Great Lakes University of Kisumu	3	2	2	2	18	18	3	-	22	21	48	43	**91**
Kabarak University	5	-	18	7	47	27	15	12	4	2	89	48	**137**
KAG- EAST University	29	3	3	-	1	-	-	-	29	13	62	16	**78**
KCA University	8	-	5	3	54	25	35	16	3	1	105	45	**150**
Kenya Highland Evangelical	3	-	2	-	9	3	5	3	8	4	27	10	**37**
Kenya Methodist University	5	2	17	3	134	115	36	43	-	2	192	165	**357**
Mount Kenya University	16	7	34	10	88	47	-	-	421	253	559	317	**876**
Pan African Christian University	3	3	7	5	17	8	-	-	21	14	48	30	**78**
Scott Christian University	1	1	5	1	5	1	-	2	5	4	16	9	**25**
St. Pauls University	8	4	32	9	196	179	8	3	-	-	224	195	**439**
Strathmore University	9	2	35	17	42	17	12	9	75	91	173	136	**309**
United States International University	23	9	80	45	72	63	-	-	-	-	175	117	**292**
University of Eastern African, Baraton	7	4	9	4	37	17	-	-	71	61	124	86	**210**
TOTAL	**165**	**57**	**333**	**142**	**862**	**627**	**139**	**102**	**679**	**474**	**2,178**	**1,402**	**3,580**

Commission for Higher Education (2018)

APPENDIX IX: OUTPUT

Hierarchical Regression statistics

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.832
Bartlett's Test of Sphericity	Approx. Chi-Square	1945.876
	Df	28
	Sig.	.000

Communalities

	Initial	Extraction
i accomplish my tasks through good attitude, and collaborative knowledge wit htohter collegues	1.000	.801
perceived behavioural control towards knolwedge sharing influence employees actual knowledge sharing behaviour	1.000	.843
i am willing to share my knowledge with my collegues freely	1.000	.814
attitude towards KS behaviour influence employees intention to share knowledge	1.000	.777
when i learn new knolwedge i share with my collegues about it	1.000	.694
i seek my collegues' knowledge sharing experience when i need to learn something	1.000	.812
i utilize the available tools to share my knowledge with my collegues	1.000	.854
i attend and contribute in different knowledge sharing activities	1.000	.533

Extraction Method: Principal Component Analysis.

Total Variance Explained

Component	Initial Eigenvalues			Extraction Sums of Squared Loadings			Rotation Sums of Squared Loadings		
	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	4.424	55.299	55.299	4.424	55.299	55.299	3.155	39.439	39.439
2	1.705	21.314	76.613	1.705	21.314	76.613	2.974	37.174	76.613
3	.703	8.792	85.405						
4	.373	4.661	90.066						
5	.244	3.044	93.110						
6	.213	2.668	95.778						
7	.193	2.411	98.189						
8	.145	1.811	100.000						

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component	
	1	2
i accomplish my tasks through good attitude, and collaborative knowledge wit htohter collegues	.615	-.650
perceived behaviooural control towards knolwedge sharing influence employees actual knowledge sharing behaviour	.745	-.537
i am willing to share my knowledge with my collegues freely	.842	
attitude towards KS behaviour influence employees intention to share knowledge	.881	
when i learn new knolwedge i share with my collegues about it	.782	
i seek my collegues' knowledge sharing experience when i need to learn something	.857	
i utilize the available tools to share my knowledge with my collegues	.733	.563
i attend and contribute in different knowledge sharing activities		.640

Extraction Method: Principal Component Analysis.

a. 2 components extracted.

Rotated Component Matrix[a]

	Component	
	1	2
i accomplish my tasks through good attitude, and collaborative knowledge wit htohter collegues	.894	
perceived behavioural control towards knolwedge sharing influence employees actual knowledge sharing behaviour	.911	
i am willing to share my knowledge with my collegues freely	.837	
attitude towards KS behaviour influence employees intention to share knowledge	.665	.579
when i learn new knolwedge i share with my collegues about it		.744
i seek my collegues' knowledge sharing experience when i need to learn something		.790
i utilize the available tools to share my knowledge with my collegues		.912
i attend and contribute in different knowledge sharing activities		.707

Extraction Method: Principal Component Analysis.

Rotation Method: Varimax with Kaiser Normalization.

a. Rotation converged in 3 iterations.

KMO and Bartlett's Test

Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.730
Bartlett's Test of Sphericity	Approx. Chi-Square	780.569
	df	10
	Sig.	.000

Communalities

	Initial	Extraction
expressing my eomotions is not a problem to me	1.000	.660
i often find it diffuclt to see things from another's perspective	1.000	.688
On the whole, I'm a highly motivated person.	1.000	.800
I usually find it difficult to regulate my emotions.	1.000	.435
I have good control of my own emotions.	1.000	.459

Extraction Method: Principal Component Analysis.

Total Variance Explained

	Initial Eigenvalues			Extraction Sums of Squared Loadings		
Component	Total	% of Variance	Cumulative %	Total	% of Variance	Cumulative %
1	3.042	60.832	60.832	3.042	60.832	60.832
2	.821	16.416	77.249			
3	.634	12.688	89.937			
4	.302	6.033	95.970			
5	.201	4.030	100.000			

Extraction Method: Principal Component Analysis.

Component Matrix[a]

	Component
	1
expressing my eomotions is not a problem to me	.812
i often find it diffuclt to see things from another's perspective	.829
On the whole, I'm a highly motivated person.	.895
I usually find it difficult to regulate my emotions.	.660
I have good control of my own emotions.	.677

Extraction Method: Principal Component Analysis.

a. 1 components extracted.

Correlation results

Correlations

		KSB	Selfawarenes s	selfregulation	socialskill	Interpersonalskills	humility	Tleadership
KSB	Pearson Correlation	1	.666**	.533**	.546**	.579**	.673**	.615**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	337	337	337	337	337	337	337
Selfawareness	Pearson Correlation	.666**	1	.502**	.391**	.387**	.462**	.523**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	337	337	337	337	337	337	337
Selfregulation	Pearson Correlation	.533**	.502**	1	.504**	.345**	.441**	.339**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	337	337	337	337	337	337	337
socialskill	Pearson Correlation	.546**	.391**	.504**	1	.434**	.571**	.373**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	337	337	337	337	337	337	337
Interpersonalskills	Pearson Correlation	.579**	.387**	.345**	.434**	1	.593**	.490**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	337	337	337	337	337	337	337
humility	Pearson Correlation	.673**	.462**	.441**	.571**	.593**	1	.499**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	337	337	337	337	337	337	337
Tleadership	Pearson Correlation	.615**	.523**	.339**	.373**	.490**	.499**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	337	337	337	337	337	337	337

**. Correlation is significant at the 0.01 level (2-tailed).

Regression results

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.812[a]	.659	.654	.42696	.659	127.880	5	331	.000	1.842

a. Predictors: (Constant), humility, selfregulation, Selfawareness, Interpersonalskills, socialskill

b. Dependent Variable: KSB

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	116.560	5	23.312	127.880	.000[b]
	Residual	60.340	331	.182		
	Total	176.900	336			

a. Dependent Variable: KSB

b. Predictors: (Constant), humility, selfregulation, Selfawareness, Interpersonalskills, socialskill

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.371	.155		2.387	.018
	Selfawareness	.359	.038	.369	9.367	.000
	selfregulation	.101	.039	.105	2.583	.010
	Socialskill	.099	.040	.104	2.476	.014
	Interpersonalskills	.175	.039	.184	4.528	.000
	Humility	.285	.045	.288	6.321	.000

a. Dependent Variable: KSB

Coefficient Correlations[a]

Model			humility	selfregulation	Selfawareness	Interpersonalskills	socialskill
1	Correlations	humility	1.000	-.086	-.184	-.416	-.336
		selfregulation	-.086	1.000	-.334	-.028	-.299
		Selfawareness	-.184	-.334	1.000	-.119	-.040
		Interpersonalskills	-.416	-.028	-.119	1.000	-.105
		socialskill	-.336	-.299	-.040	-.105	1.000
	Covariances	humility	.002	.000	.000	-.001	-.001
		selfregulation	.000	.002	.000	-4.185E-5	.000
		Selfawareness	.000	.000	.001	.000	-6.155E-5
		Interpersonalskills	-.001	-4.185E-5	.000	.001	.000
		socialskill	-.001	.000	-6.155E-5	.000	.002

a. Dependent Variable: KSB

Residuals Statistics[a]

	Minimum	Maximum	Mean	Std. Deviation	N
Predicted Value	1.8835	5.1350	4.1664	.58899	337
Residual	-1.69205	.99886	.00000	.42377	337
Std. Predicted Value	-3.876	1.645	.000	1.000	337
Std. Residual	-3.963	2.339	.000	.993	337

a. Dependent Variable: KSB

Moderating results

Model Summary[h]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics					Durbin-Watson
					R Square Change	F Change	df1	df2	Sig. F Change	
1	.653[a]	.426	.417	.96697632	.426	49.089	5	331	.000	
2	.666[b]	.444	.434	.95290294	.018	10.849	1	330	.001	
3	.876[c]	.767	.762	.61797566	.323	455.637	1	329	.000	
4	.882[d]	.777	.772	.60470505	.011	15.599	1	328	.000	
5	.887[e]	.787	.781	.59212898	.010	15.081	1	327	.000	
6	.899[f]	.809	.803	.56224920	.022	36.679	1	326	.000	
7	.899[g]	.809	.802	.56311178	.000	.002	1	325	.964	1.812

a. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill)
b. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill), Zscore(Tleadership)
c. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill), Zscore(Tleadership), Zscore(SA_TL)
d. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill), Zscore(Tleadership), Zscore(SA_TL), Zscore(SR_TL)
e. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill), Zscore(Tleadership), Zscore(SA_TL), Zscore(SR_TL), Zscore(SS_TL)
f. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill), Zscore(Tleadership), Zscore(SA_TL), Zscore(SR_TL), Zscore(SS_TL), Zscore(IS_TL)
g. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill), Zscore(Tleadership), Zscore(SA_TL), Zscore(SR_TL), Zscore(SS_TL), Zscore(IS_TL), Zscore(H_TL)
h. Dependent Variable: Zscore(KSB)

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	229.500	5	45.900	49.089	.000[b]
	Residual	309.499	331	.935		
	Total	538.999	336			
2	Regression	239.351	6	39.892	43.933	.000[c]
	Residual	299.648	330	.908		
	Total	538.999	336			
3	Regression	413.356	7	59.051	154.626	.000[d]
	Residual	125.643	329	.382		
	Total	538.999	336			
4	Regression	419.060	8	52.383	143.252	.000[e]
	Residual	119.939	328	.366		
	Total	538.999	336			
5	Regression	424.348	9	47.150	134.477	.000[f]
	Residual	114.652	327	.351		
	Total	538.999	336			
6	Regression	435.943	10	43.594	137.902	.000[g]
	Residual	103.056	326	.316		
	Total	538.999	336			
7	Regression	435.944	11	39.631	124.982	.000[h]
	Residual	103.056	325	.317		
	Total	538.999	336			

a. Dependent Variable: Zscore(KSB)

b. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill)

c. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill), Zscore(Tleadership)

d. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill), Zscore(Tleadership), Zscore(SA_TL)

e. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill), Zscore(Tleadership), Zscore(SA_TL), Zscore(SR_TL)

f. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill), Zscore(Tleadership), Zscore(SA_TL), Zscore(SR_TL), Zscore(SS_TL)

g. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill), Zscore(Tleadership), Zscore(SA_TL), Zscore(SR_TL), Zscore(SS_TL), Zscore(IS_TL)

h. Predictors: (Constant), Zscore(humility), Zscore(selfregulation), Zscore(Selfawareness), Zscore(Interpersonalskills), Zscore(socialskill), Zscore(Tleadership), Zscore(SA_TL), Zscore(SR_TL), Zscore(SS_TL), Zscore(IS_TL), Zscore(H_TL)

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VIF
1	(Constant)	-.151	.053		-2.863	.004		
	Zscore(Selfawareness)	.518	.065	.409	8.006	.000	.665	1.504
	Zscore(selfregulation)	-.007	.067	-.006	-.109	.913	.629	1.591
	Zscore(socialskill)	-.007	.069	-.006	-.103	.918	.586	1.706
	Zscore(Interpersonalskills)	.256	.067	.202	3.832	.000	.622	1.607
	Zscore(humility)	.251	.075	.198	3.348	.001	.496	2.017
2	(Constant)	-.151	.052		-2.905	.004		
	Zscore(Selfawareness)	.444	.068	.350	6.560	.000	.591	1.693
	Zscore(selfregulation)	-.004	.066	-.003	-.064	.949	.628	1.591
	Zscore(socialskill)	-.016	.068	-.012	-.229	.819	.585	1.709
	Zscore(Interpersonalskills)	.204	.068	.161	3.012	.003	.588	1.699
	Zscore(humility)	.210	.075	.166	2.802	.005	.482	2.074
	Zscore(Tleadership)	.220	.067	.174	3.294	.001	.605	1.653
3	(Constant)	-.015	.034		-.433	.665		
	Zscore(Selfawareness)	-.437	.060	-.345	-7.252	.000	.314	3.189
	Zscore(selfregulation)	.175	.043	.138	4.040	.000	.605	1.653
	Zscore(socialskill)	.094	.044	.074	2.117	.035	.577	1.732
	Zscore(Interpersonalskills)	.169	.044	.133	3.843	.000	.588	1.702
	Zscore(humility)	.238	.049	.188	4.905	.000	.482	2.076
	Zscore(Tleadership)	-.556	.057	-.439	-9.827	.000	.355	2.817
	Zscore(SA_TL)	1.374	.064	1.195	21.346	.000	.226	4.421
4	(Constant)	-.003	.034		-.100	.920		
	Zscore(Selfawareness)	-.087	.106	-.068	-.814	.416	.096	10.404
	Zscore(selfregulation)	-.152	.093	-.120	-1.633	.103	.126	7.955
	Zscore(socialskill)	.094	.043	.074	2.162	.031	.577	1.732
	Zscore(Interpersonalskills)	.153	.043	.120	3.529	.000	.582	1.718
	Zscore(humility)	.247	.048	.195	5.183	.000	.481	2.080
	Zscore(Tleadership)	-.492	.058	-.389	-8.533	.000	.327	3.057
	Zscore(SA_TL)	.707	.180	.615	3.924	.000	.028	36.187
	Zscore(SR_TL)	.564	.143	.483	3.950	.000	.045	22.071
5	(Constant)	-.008	.033		-.241	.810		
	Zscore(Selfawareness)	.047	.110	.037	.429	.668	.087	11.541
	Zscore(selfregulation)	.173	.124	.136	1.397	.163	.068	14.652
	Zscore(socialskill)	-.331	.117	-.261	-2.821	.005	.076	13.213
	Zscore(Interpersonalskills)	.146	.042	.115	3.452	.001	.581	1.720
	Zscore(humility)	.241	.047	.190	5.174	.000	.480	2.082
	Zscore(Tleadership)	-.476	.057	-.376	-8.398	.000	.325	3.074
	Zscore(SA_TL)	.477	.186	.414	2.560	.011	.025	40.283
	Zscore(SR_TL)	.036	.195	.031	.183	.855	.023	42.960
	Zscore(SS_TL)	.718	.185	.631	3.883	.000	.025	40.616
6	(Constant)	-.005	.031		-.162	.871		
	Zscore(Selfawareness)	.226	.108	.178	2.086	.038	.080	12.467
	Zscore(selfregulation)	.139	.118	.110	1.187	.236	.068	14.684
	Zscore(socialskill)	-.121	.117	-.096	-1.040	.299	.069	14.488
	Zscore(Interpersonalskills)	-.214	.072	-.169	-2.977	.003	.183	5.474
	Zscore(humility)	.216	.044	.171	4.870	.000	.476	2.100
	Zscore(Tleadership)	-.497	.054	-.393	-9.228	.000	.324	3.088
	Zscore(SA_TL)	.125	.186	.109	.672	.502	.022	44.628
	Zscore(SR_TL)	.082	.186	.070	.440	.660	.023	43.032
	Zscore(SS_TL)	.368	.185	.323	1.991	.047	.022	45.019

	Zscore(IS_TL)	.715	.118	.624	6.056	.000	.055	18.126
7	(Constant)	-.005	.031		-.161	.872		
	Zscore(Selfawareness)	.228	.121	.180	1.889	.060	.065	15.478
	Zscore(selfregulation)	.141	.121	.111	1.165	.245	.065	15.475
	Zscore(socialskill)	-.120	.125	-.094	-.960	.338	.061	16.434
	Zscore(Interpersonalskills)	-.213	.072	-.168	-2.942	.003	.180	5.565
	Zscore(humility)	.211	.137	.166	1.539	.125	.050	19.834
	Zscore(Tleadership)	-.498	.054	-.393	-9.133	.000	.318	3.147
	Zscore(SA_TL)	.121	.208	.105	.581	.562	.018	55.696
	Zscore(SR_TL)	.080	.190	.068	.420	.675	.022	45.042
	Zscore(SS_TL)	.364	.199	.321	1.834	.068	.019	51.943
	Zscore(IS_TL)	.714	.119	.624	5.991	.000	.054	18.431
	Zscore(H_TL)	.010	.229	.009	.045	.964	.015	68.092

a. Dependent Variable: Zscore(KSB)